CHAPTER 5

RECONCILING NATURAL AND CULTURAL RESOURCE PROTECTION WITH BASE REDEVELOPMENT

California military bases have the potential to generate jobs and revitalize the economies of the surrounding communities and the State as a whole. There is another aspect to base reuse that cannot be ignored, however. Many of the bases have significant natural and cultural resources that must be conserved in conjunction with appropriate development. This makes it necessary to mitigate some of the potentially adverse effects of base development. Balancing conservation with development is one of the more challenging issues facing local reuse entities, and one of the more frustrating because of the many regulatory agencies that are necessarily involved in the process.

Balancing conservation with development is one of the more challenging issues facing local reuse entities.

Air Quality and Emissions

Regulation of air quality poses a significant hurdle to any large development in California. This is in part because of the fragmented controls over air pollution. Mobile sources of pollutants are regulated by the State Air Resources Board (ARB), primarily through regulation of fuel formulas. Stationary sources are regulated through permitting systems run by 34 independent entities — Air Quality Management Districts (AQMD) for multiple county regions or Air Pollution Control Districts (APCD) for single county regions.

All of California's major closing bases are located in "non-attainment areas" where air pollution levels exceed federal standards. In those areas, the Clean Air Act has required local air districts to develop and follow implementation plans to bring the areas into compliance with federal standards. The regulations developed under those plans are intended to reduce air emissions and improve air quality, but they may hinder the ability to develop the closed military bases for other uses. It is essential for the military branches, the State, and private parties to take these air quality regulations into account during reuse planning. Table 5-1 contrasts some key regulatory provisions of the seven districts that govern air quality for the major closing California bases.

Air emission reduction credits (ERCs) are one of the major tools that local air districts use in their implementation plans. In non-attainment areas, a facility that produces air emissions can obtain ERCs from the local air district (AQMD/APCD) prior to closing and then transfer the ERCs to any future facility that wishes to operate on the same property. The ERCs entitle a future facility to produce comparable or lower levels of air emissions. If the closing facility does not obtain its ERCs, the AQMD/APCD will count the reduction in emissions

Table 5-1

Generation of Air Emission Credits from Closing Military Bases
Summary of District Banking Provisions

District	*Bases Impacted*	*ERC Application Due Date*	*If Application Due Date is Missed*	*RACT/BARCT/BACT* Adjustment Required*	*Discount for Community Bank*	*Averaging Period for Determining Available Reductions*
Bay Area AQMD	NAS Alameda, Oakland Naval Hospital, NS Treasure Island, Presidio of SF, Hamilton AAF, NAS Moffett Field, Hunters Point, Mare Island	Within 18 months after reduction occurs	No credits available	No	None	12 months prior to shutdown or reduction
Sacramento Metropolitan AQMD	Mather AFB, Sacramento Army Depot	Within 60 days after reduction occurs	Request up to 90 day extension	RACT adjustment limited to lesser of 50% or 250 lbs/day	10%	2 years immediately preceding reduction or 2 consecutive years out of 5 years
Monterey Bay Unified APCD	Fort Ord	Within 60 days after reduction occurs	No credits available	No	10%	3 years immediately preceding reduction or 2 consecutive years out of 5 years
South Coast AQMD	Norton AFB, March AFB, MCAS Tustin, MCAS El Toro, NS Long Beach	Within 90 days after reduction occurs	No credits available	No	None	2 years immediately preceding reduction or 2 consecutive years out of 5 years
Mojave Desert AQMD	George AFB	No banking rule at this time; work in progress				
San Diego County Unified APCD	NTC San Diego	Within 3 years after reduction occurs	No credits available	No	None	2 years immediately preceding reduction or 2 consecutive years out of 3 years
San Joaquin Valley Unified APCD	Castle AFB	Within 180 days after reduction occurs	No credits available	No	10%	2 years immediately preceding reduction or 2consecutive years out of five years

* *Reasonably Available Control Technology* (considering cost); *Best Available Reasonable Control Technology* (considering effectiveness and reasonable costs); *Best Available Control Technology* (without cost considerations).

related to the facility's closure toward the overall emission reductions needed in that area to meet federal air-quality standards. Without the ERCs, it may be difficult or impossible for a future facility to obtain needed air permits to conduct activities on that property. In order to achieve their maximum reuse potential, most closing bases in California will have to obtain ERCs prior to closure from the local AQMD/APCD and then transfer the ERCs to reuse entities. ***The Task Force recommends that local reuse entities contact their local AQMD/APCD early in the reuse process and strongly encourage the military base to work with the district to quantify ERC's.***

In order to achieve their maximum reuse potential, most closing bases in California will have ot obtain emission reduction credits prior to closure.

ERCs have significant economic value, and there generally is a strong incentive for facility operators to obtain them. However, closing bases may lack incentive to apply for the maximum number of ERCs. Some of these disincentives are:

Cost. The application fees for ERCs may be significant. ERC application fees can be hundreds or even thousands of dollars for each air permit held by a facility, and some military bases have more than one hundred permits. It could cost several hundred thousand dollars for a closing base to apply for all of its possible ERCs.

Time and Labor. When a permitted facility shuts down, the owner usually has up to 90 days to apply for ERCs. The application process is labor intensive and requires the facility to pour through its records, complete forms, and pay its application fees. Unfortunately, the manpower resources at closing bases typically are reduced as the closing date nears, making it very difficult for base personnel to accomplish this task.

The central difficulty posed by ERCs is that the military branches incur the cost and burden of obtaining them, while the reuse entities and the surrounding community benefit from the economic activities made possible by ERCs or suffer the economic consequences if the ERCs are not obtained.

Some additional factors may hinder effective reuse of a closing base. It is difficult for the entities planning for reuse activities at closing bases to know the type of ERCs that may become available. This lack of information can hinder effective reuse planning. Another complicating factor is that all reuse activities must conform with the implementation plans required by the Clean Air Act. Reuse plans involving emissions-producing facilities should anticipate regulatory changes made necessary by new or revised implementation plans.

Recommendation:

The Task Force recommends that legislation be enacted to require regional air districts to work with the military to quantify Emission Reduction Credits and transfer them from a closing base to the local reuse entity or to developers with approved development plans approved by the local reuse entity. The Task Force further recommends that Federal legislation be enacted to require military bases to cooperate with local districts in developing ERC data. *The legislation would mitigate the potential loss of air emission credits through direction given to*

regional air quality management districts (AQMDs), as follows:

(1) ERCs would be created and held in reserve for the State-recognized local reuse entity or developers to acquire following the base's closure. Creation of the ERCs would not depend on the base's decision to apply for them. Any excess ERCs not ultimately needed for reuse would be returned to the AQMD/APCD.

(2) AQMDs should be directed to establish the operational military base, rather than the post closure base, as the baseline for assessing emission changes and establishing ERCs. Air emission credits in effect at the time the base closure decision becomes final should be available to future owners or operators of base property, for reuse of the base facilities. However, such credits may not be sold or traded for use outside the base. Emission reductions may not be applied by the AQMD to a greater extent than would be applied to any other industrial user under the district's jurisdiction.

(3) ERC's preserved shall include mobile sources, to the extent allowed under regional air district regulations.

(4) AQMDs should be required to consider reuse plans for closing military bases when preparing rules and regulations for air quality implementation plans.

(5) Prior to taking any action affecting air emission reductions for a closing military base, districts should be required to notify each local agency whose jurisdiction includes portions of the base or which is immediately adjacent to the base.

(6) AQMDs should be directed to cooperate with efforts by military bases to identify and quantify any potential emission credits for which adequate records may not have been maintained.

(7) AQMDs should be prohibited from assessing additional fees to maintain air emission credits during the time that base facilities are shut down. When the credits are reclaimed by a subsequent user, an appropriate fee to reimburse district costs may be assessed to reinstate them.

A new development that may affect some Southern California bases is the RECLAIM program being implemented by the South Coast Air Quality Management District. RECLAIM creates a free-market "tradable permits" system for emissions of nitrogen oxide and sulfur oxide, which are precursors of ozone and particulate matters. The program places a facility cap on emissions of these two substances, with annual reductions to the cap through the year 2003. Facilities determine on their own how to reduce their emissions. Facilities that exceed the required reductions may sell their excess credits on an open market, while facilities that cannot meet the reductions may buy additional credits or pay a penalty.

Military bases within SCAQMD, including closing bases, are subject to RECLAIM. The major impacts will be costly monitoring and reporting requirements. Norton AFB will close before the program is fully implemented, but it is not clear at this time how RECLAIM will affect the realignments or closures of March AFB, El Toro MCAS, and other installations within SCAQMD.

Record of Communication -- discussion with Chris Shingleton, Asst City Mgr, City of Tustin. 3/15/94

1) largest obstacle: prohibitive infrastructure costs. $150 - $200 M. (?? accurate??)
Local utilities won't accept connections with the base utilities unless these base utilities are upgraded to be compatible with local infrastructure.

Infrastructure needs:
Roads
Stormdrains
domestic water
reclaimed water for irrigation purposes
SouthCalifEdison (electric, natural gas)
Flood control
cable TV (this is hooked up only in base housing areas)

Tustin can't assess sufficient property taxes to pay for infrastructure improvements. To pay for improvements, Tustin would need to assess its property at the equivalent of $200K an acre; as it stands, they could only feasibly/legally assess it for $10 - 15K an acre. (Because this is what the property is valued at --- ? based on what the market will bear?) Calif has a 1% prop. tax limit. Setting up a special assessment district for utilities would allow them to capture an additional 1.3% above that, but the assessment would need to be far greater in order to pay for the utilities. In summary: a significant finance gap.

2) Chris & others are dissatisfied w/ how the Pryor amendments affect the dispersal of personal property. The community assumes caretaker status, yet all personal property (utilities et al) remains under control of military. so the city has the structures themselves, yet can't do anything with them, essentially, because the military retains responsibility for utilities and anything "mission-related" (military often describes this as everything but the building itself!)

3) Localities should be able to play a bigger role in property disposal. Charleston wants to be able to lease property to military who remain on post for reserve function purposes. The reuse authority should be transferred to the localities; then they can lease it out. Otherwise, you have this parcel of base property that's retained by military, then in a few years they quit the property, and then this parcel of property has to go through BRAC.

Document Separator

Mr. Chairman and Members of the Committee, on behalf of Secretary Perry, thank you for this opportunity to discuss the Department's base closure and transition efforts.

The Office of the Assistant Secretary of Defense for Economic Security is responsible for developing, implementing and overseeing policy regarding the recommendation of U.S. military bases for closure or realignment. We are also responsible for providing assistance through the base transition coordinator structure to those communities facing the impact that these closures and realignments can have on their local economies. Our office also includes the Office of Economic Adjustment (OEA). To meet the community redevelopment challenge, we are responsible for developing and coordinating closure and property transfer policies that support the President's Five-Part Plan for economic revitalization. Today, I would like to address some of our major challenges and accomplishments in these areas, and outline some of our next steps.

WHY CLOSE BASES?

As we downsize and restructure our forces to meet new military and political challenges to our national interests, the need for base realignments and closures becomes self-evident. We are reducing our forces by about one-third from the peak in FY 1985, and it is clear that we no longer need the facility infrastructure that supported the Cold War force. Less obvious, we will also have a smaller support workload which will require reductions in the Department's common support infrastructure too. We have made substantial progress in reducing DoD's overseas base structure which is more directly tied to force withdrawals. Indeed, approximately forty percent of our overseas base structure has closed or is in the process of closure. Reducing DoD's base structure in the U.S. is more difficult and complex.

Congress passed legislation in 1988 (Public Law 100-526), and 1990 (Public Law 101-510) creating independent Commissions to make base closure and realignment recommendations. When the first Commission met in 1988, there were 495 major U.S. bases in the Department's inventory. Since then, three BRAC rounds in 1988, 1991 and 1993 have resulted in decisions to close 70 major bases, leaving 425 major bases in the U.S. and its possessions. The 70 bases recommended for closure by these Commissions were all approved by the President and the Congress. Current law authorizes one more Commission in 1995, and the Department is working to develop a set of recommendations for the Commission to consider.

These closures and realignments will result in the elimination of about 150,000 civilian and military positions and are expected to save about $1.3 billion during their

implementation. The $1.3 billion in savings takes into account approximately $4 billion in environmental restoration costs which will be incurred during closure implementation. The vast majority of these clean up costs would have been required even if the bases had remained open. By the time all announced closures have been completed, they will generate annual savings of about $4.6 billion each year. These savings are critical to meeting the long term readiness and modernization needs of the Military Services.

However difficult these closure decisions have been, they have netted only a 15% reduction in our domestic base structure when measured in terms of plant replacement value. In contrast, the Department's military personnel strength in the U.S. will be cut by about thirty percent. Therefore, as we begin the BRAC 95 process, we have a great deal more to close and realign if we are to balance our base and force structures.

New Base Transition Approach

Everyone--the President, the Congress, Secretary Perry and the entire Department recognizes that downsizing our base structure is difficult for the Military Services and the people and economies affected. In many cases, closing military bases results in the loss of jobs in areas without substantial offsetting industrial development. It thus has a deep impact on the local economy.
Even in those large cities which appear relatively strong, a military base often represents a major employment center and a significant economic stimulus for the local economy.

The President and the Department recognizes that the manner in which DoD disposes of real and personal property at closing bases can have a dramatic impact on the local community's prospects for economic recovery. In the past, the traditional property disposal methods focused on maximizing proceeds from the sale of real and personal property. This Administration is now focusing on enhancing the prospects for community economic recovery.

Last July President Clinton announced a major new plan to speed the economic recovery of communities where military bases are slated to close. In a sharp departure from the past, the President pledged to give top priority to early reuse of a closing base's valuable assets -- its land, buildings and equipment, and its skilled and dedicated workforce. Rapid redevelopment and the creation of new jobs in base closure communities are the principal goals of the President's new initiative.

The President's Five Part Plan

This new philosophy embodied in the President's Five-Part Plan includes:

Jobs-centered property disposal that puts local economic redevelopment first by transferring land from DoD to public or private control as quickly as possible for rapid job creation.

Fast-track environmental cleanup that removes needless delays while protecting human health and the environment, by starting the required environmental analyses earlier and completing them sooner.

Transition coordinators at major bases slated for closure where DoD people are on-site and available, on a day-to-day basis, to assist in cutting through red tape.

Easy access to transition and redevelopment help for workers and communities allowing them to obtain information and assistance from other Federal agencies about programs and grant money available for those that qualify.

Economic development planning grants to base closure communities, with DoD's Office of Economic Adjustment visiting communities sooner and providing more money for planning grants faster.

The task of remaking the economic foundation of a community is never easy and requires the cooperation of Federal, state, and local agencies, as well as the private sector. The truth is, without broad-based local leadership, the best government assistance is likely to be ineffective. A closed military base can be a community's single greatest asset in charting a new future. An airfield, a port, or the land, buildings, furniture and equipment on a base can stimulate new economic activity.

Making real and personal property affordable, more quickly, to communities is a fundamental change in the way the Department and the Government will do business in the future. Previous Federal law required DoD to charge full price when selling or leasing land at closing bases to those willing to create jobs and spur economic development.

Policy Framework

The President asked the National Economic Council (NEC), an interagency coordinating arm of the White House, and the DoD to draft a proposal that put economic development at the center of base closure asset disposition. The NEC convened an interagency working group that created the following framework for base disposal:

Where a ready market exists - sell properties immediately for public or private development to speed up job creation. If an entrepreneur is willing to invest in surplus land and facilities, he or she is likely to generate jobs quickly.

Where a ready market does not exist - make property available to the local redevelopment authority, without initial consideration, for economic development. Recoup value by sharing the net profits between the DoD and the local redevelopment authority when the property is subsequently sold or leased.

Statutory Changes

The Congress, responding to the President's Plan and input from the communities, created new base closure community assistance authorities, Title XXIX, of the National Defense Authorization Act for FY 1994. Based largely on legislation sponsored by Senator Pryor, Title XXIX provides the legal authority to carry out key parts of the President's Plan. Among other things it authorizes conveyance of real and personal property at or below fair market value to local redevelopment authorities, and sharing profits on any subsequent sales and leases. It also mandates an accelerated screening process so communities will know what will be available sooner. DoD can still transfer surplus property for a variety of "public benefit" uses, i.e., recreation, aviation, education and health programs.

DOD REGULATIONS

Title XXIX requires the Secretary of Defense to write formal regulations to implement some of its provisions. Since it was expected that some communities might wish to take advantage of these authorities immediately, DoD has issued most of these regulations in the form of an interim rule. This procedure allows DoD to use the new authorities right away without waiting until the final regulations are issued later this year, after consideration of public comments on the interim rule. Nonetheless, we have begun full consultation with affected communities, and may very well modify the regulations as a result.

ACCOMPLISHMENTS

The major actions the Department has taken to implement the President's Five-Part-Plan are:

Jobs-centered property disposal...wrote interim and proposed rules for implementation of Title XXIX. These were published in the April 6 Federal Register and included verbal and flowchart instructions on the property disposal process. Aspects of these rules include: sales directly to private developers for rapid job creation or transfers to local redevelopment authorities for economic development; interim leases and delegation of lease authority; early community involvement in an accelerated screening process; and, transfer of personal property to enhance economic development.

We are currently in a 90-day public comment period. In order to encourage dialogue concerning these regulations, the Department is sponsoring, a series of outreach meetings at various locations throughout the country (Washington, D.C. - April 28-29; Chicago - May 5-6; Dallas - May 9-10; San Francisco - May 12-13).

Fast-track environmental cleanup...the Department has been working since July to put fast-track clean-up into effect to remove needless delays and protect human health and the environment. Restoration Advisory Boards consisting of a member of the local community, an Environmental Protection Agency and a State regulator, and an installation representative have been established at closing installations which require significant environmental cleanup. Each Board considers base reuse plans, assesses community needs and then determines how to proceed with the cleanup plan. To assist this process DoD has provided funding to EPA to staff the Boards and provide responsive oversight.

Transition coordinators at major bases slated for closure...an important part of the President's Plan is the assignment of full time, on-site, Base Transition Coordinators to closing bases. The Department currently has 67 of these fully trained Coordinators in the field. They identify and help integrate community reuse needs, and foster the community's and DoD's interactions with other Federal agencies. The Coordinators serve as a single Federal point of contact for the community and in that role help cut through Federal red tape. Coordinators are participating in community redevelopment meetings, facilitating resolution of property issues, and providing other Federal assistance. In addition, the Base Transition Office, through the on-site Coordinators, has established a reporting system which allows base and community officials to surface local problems and concerns to senior DoD leadership. Working with the Military Departments, DoD staff offices, and other Federal Agencies, the Base Transition Office monitors all taskings until resolved.

Easy access to transition and redevelopment help...the Office of Economic Adjustment (OEA) and the Base Transition Coordinators work with Federal, State, and local representatives as well as the private sector to identify specific Defense-related adjustment needs and to develop strategies to mitigate adverse effects. DoD has also provided $225 million to the Department of Labor to help displaced workers and $130 million to the Economic Development Administration for community adjustment support. I am encouraged that these agencies have now begun to budget for defense conversion related requests for their programs. At the end of 1993, President Clinton and Secretary of Labor Reich initiated interagency assistance team visits to major closing bases so that federal retraining programs and retirement incentives could be explained to civilian employees about to lose their jobs.

To further assist those affected by the defense drawdown, DoD produced the Directory of Federal Reinvestment and Transition Initiatives for People, Business and Communities which describes the host of federal programs available to help with transition assistance. In addition, the Department of Commerce, with help from DoD, established an Office of Economic Conversion Information (OECI) which is a clearinghouse that coordinates the vast amount of economic conversion information that exists and makes it available by phone and computer.

Economic development planning grants to base closure communities...OEA administers about a $30 million grant program that is used to support the development and redevelopment plans for closing installations. Currently OEA is working with 78 communities affected by base closures, realignments or personnel reductions. The total OEA budget for FY 1994 is $39 million. That same level is requested in FY 1995.

During FY 1993, approximately $18 million in grant assistance was provided by OEA to 44 of these communities affected by base closures, realignments or personnel reductions. OEA estimates that in FY 1994, another $22 million will be made available for these types of planning assistance. The same level of support is anticipated in FY 1995.

In addition to assisting communities affected by base closures, OEA is also active in providing planning assistance for communities facing defense contractor cutbacks, and in helping states and regions in doing proactive defense conversion planning. OEA assisted 35 groups in FY 1993, providing approximately $6 million to support their planning needs. Another $10 million will be needed for these communities in FY 1994 and FY 1995.

I believe regional economic diversification planning is critically important for regions which have a significant dependence upon defense spending. Such planning reflects prudent leadership given the long term prospects for defense spending. It also provides communities potentially affected by future base closures with a chance to assess their assets of location, capital and human resources before engaging in a base closure debate.

BRAC FUNDING

The BRAC account, as a multi-functional funding source, has provided the Department the flexibility it needs to react to changing base closure needs and respond to community desires to accelerate redevelopment. The account, however, has been the source of concern because of its increasing size...$2.7 billion in FY 1995...and the uneven obligation rates of previous year appropriations for this account.

Management of the BRAC account is a matter of concern to me. I want to ensure that the Department requests only that which it needs in any fiscal year, and that the costs that the account pays for are directly linked to closure actions. Unfortunately, the BRAC decision process and the need for rapid closure execution do not lend themselves to the normal programming and budgeting process.

FY 1995 BUDGET REQUEST

FY 1995 budget includes $2.7 billion for the BRAC program. It is made up of $2.3 billion for BRAC 93, $265.7 million of BRAC 91, and $87.6 million for BRAC 88.

I want to stress several assumptions that were considered in preparing this budget request. First, it was prepared assuming that the full value of the FY 95 request is required. Anticipated unobligated balances were taken into consideration in formulating the FY 95 budget. The FY 94 rescission of $508 million will delay the closure of some bases and these funds are needed to keep the program on track. We plan to utilize available funds to mitigate the impact of the rescission in FY 94 and push the impact into FY 95. Thus, your full support of the FY 95 request for BRAC is crucial.

The following summarizes the Department's FY 1995 request for each of the three BRAC rounds by major functional area.

FY 95 Base Closure Account Budget Request ($M)

COSTS	BRAC 88	BRAC 91	BRAC 93
Military Construction	$0.0	$128.3	$1,203.7
Family Housing			
Construction	0.0	23.1	142.9
Operations	0.0	0.6	0.0
Environmental	66.8	138.7	302.7
Operation and Maintenance	20.8	323.2	758.1
Military Personnel	0.0	0.3	26.2
Other	0.0	42.0	157.9
Prior Year Unobligated Balances	0.0	(82.7)	(268.6)
Estimated Land Revenue	0.0	(174.8)	0.0
Transfer from Home Owners			
Assistance Program (HAP)	0.0	(133.0)	0.0
Budget Request	$87.6	$265.7	$2,322.9

BRAC SAVINGS

The FY 1995 budget request represents a net expenditure requirement and takes into account the following anticipated savings during the budget year.

SAVINGS	BRAC 88	BRAC 91	BRAC 93
Military Construction	108.6	27.8	44.5
Family Housing			
Construction	3.5	0.0	0.0
Operations	63.9	46.9	2.2
Operation and Maintenance	312.4	626.9	171.9
Military Personnel	308.3	533.2	88.0
Other	0.5	163.9	75.7
Total Savings	797.2	1,398.7	382.3

Some have questioned whether the base closure process actually saves resources, given the high cost of closing bases and accelerating their environmental cleanups. While it is true that there are substantial costs associated with closures, some of these represent governments liabilities, regardless of whether a base remains open or is closed.

The past three BRAC rounds will generate a net savings of $5.3 billion after implementation is completed in FY 1999.. These figures exclude associated environmental cleanup which the Department is liable for even if a base remains active. BRAC 1988 will generate a net savings of $500 million during the six year implementation period, and an annual savings of almost $800 million each year thereafter. Likewise, we estimate that the BRAC 91 closures will realize a net savings of $3.5 billion after implementation and an annual savings of $1.6 billion. The net savings from the BRAC 1993 actions are estimated to be $1.3 billion, and annual savings are estimated at $2.1 billion after the implementation period. Environmental cleanup of these closing bases will total $4.0 billion during the implementation period. The aggregate annual savings of $4.6 billion from these closures is critical to financing the Military Service's near term readiness and long term modernization requirements.

BRAC Financial Summary

($ Million)

DoD-Wide	BRAC 88	BRAC 91	BRAC 93	TOTAL
BRAC Cost (BA)	1,969	2,820	6,084	10,872
BRAC Savings	2,469	6,306	7,417	16,192
Net BRAC Cost (Savings)	(500)	(3,486)	(1,334)	(5,319)
Environmental Costs	780	1,452	1,756	3,988
Annual Savings (after 6 yr implementation period)	797	1,622	2,144	4,563

This same financial logic drives the Department's plans for the 1995 BRAC round.

BRAC 95 PROCESS

Reducing the Department's unneeded base infrastructure through base closures and realignments is critical to funding readiness and modernization. If we don't balance our base and force structures we will squander precious resources maintaining unnecessary infrastructure.

The Department's inability to appropriately reduce the base structure in the post-Vietnam War period was one reason for the unacceptable readiness of that era,characterized , so well, by General Shy Meyer's indictment that we had a hollow Army. The Department is determined not to repeat that blunder in the 1990s. We have made good progress so far, but there are more reductions to be accomplished. The 1995 round of base realignments and closures (BRAC 95) is the last round of closures authorized under Public Law 101-510. Hence, our efforts now are particularly important...and particularly difficult.

BRAC 1995 Policy

On January 7, 1994, then Deputy Secretary Perry formally began the BRAC 95 process. He directed the Military Departments and Defense Agencies to recommend further infrastructure reductions consistent with DoD's planned force reductions.

Significant reductions in infrastructure and overhead costs can only be achieved after careful studies address not only structural changes to our inventory of bases, but also operational and organizational changes, with a strong emphasis on cross-service uses of common support assets. It is DoD policy to make maximum use of common support assets. Within BRAC 95, DoD Components will look for cross-service or intra-service opportunities to share assets and the Components will also look for opportunities to rely on a single Military Department for support.

The BRAC 95 process is designed to enhance opportunities for consideration of cross-service tradeoffs and multi-service use of the remaining infrastructure. Sharing authority among the Military Departments, Defense Agencies and the Office of the Secretary of Defense is essential to sound decision making and taking advantage of available cross-service asset sharing opportunities. DoD Components and BRAC 95 Joint Cross-Service Groups will, where operationally and cost effective, strive to:

retain in only one Service militarily unique capabilities used by two or more Services;

consolidate workload across the Services to reduce capacity; and assign operational units from more than one Service to a single base. In developing BRAC 95 closure and realignment recommendations, the Department must carefully balance the affordability of closures in the near-term; the need for long-term infrastructure savings; and the ability to expand, to reconstitute the force if need be.

BRAC 1995 Organization

To facilitate this process, the Deputy Secretary established Joint Cross-Service Groups in five areas with particularly significant cross-service potential. These joint cross-service groups are:

Depot Maintenance
Laboratories
Test and Evaluation
Military Treatment Facilities
Undergraduate Pilot Training

These joint cross-service groups were formed to address the base structure drawdown from a workload, rather than a force structure perspective. Past BRAC actions have been almost exclusively Military Service initiatives, with little cross-service analysis. The recommendations have also focused primarily on bases directly impacted by force structure changes, with very little analysis on the common support structure that undergirds these forces. In BRAC 1995, we hope to address this area of the base structure, consolidating where possible and contracting where practical. In this regard, we hope to incorporate emerging industrial base considerations into BRAC deliberations.

Additionally, the Deputy Secretary established two oversight groups having significant management oversight responsibilities in BRAC 95 and a joint group to address economic impact.

The first oversight group is the **BRAC 95 Review Group**, chaired by the Under Secretary of Defense for Acquisition and Technology (USD(A&T)) with senior representatives from each Military Department and the Chairs of each BRAC 95 Joint Cross-Service Group, as well as other representatives of the OSD, the Joint staff and the Defense Logistics Agency. The BRAC 95 Review Group will review BRAC policies and procedures; review excess capacity analyses; propose closure or realignment alternatives and establish excess capacity reduction targets for consideration by the DoD Components; review the BRAC 95 work products of the DoD Components and BRAC 95 Joint Cross-Service Groups; and make recommendations to the Secretary of Defense, including cross-service tradeoff recommendations.

The second group is the **BRAC 95 Steering Group**, chaired by the Assistant Secretary of Defense (Economic Security) with membership composed of: study team leaders from the Military Departments, DLA, and each Joint Cross-Service Group; and representatives from the Joint Staff, Comptroller, Program Analysis & Evaluation, General Counsel and Environmental Security. The BRAC 95 Steering Group assists the BRAC 95 Review Group in exercising its authorities and reviews DoD Component supplementary BRAC 95 guidance.

Third, the BRAC 1995 Joint Cross Service Group on Economci Impact has bee established since economic impact is one of the final selection criteria and is an important consideration after military value.

The Components will conduct their BRAC 95 analysis using: the Department's force structure plan. which is currently based on the Bottom Up Review; the final selection criteria; and certified data as required by law. However, within this overall

framework, each Military Department is allowed some freedom to formulate a process that allows them to exercise their military judgment and reflect their inherent mission diversity.

The Services and Defense Agencies are now collecting data upon which they will base their BRAC 95 analysis. The BRAC 95 Joint Cross-Service Groups have completed the initial analytical design for their functions and have issued that guidance to the DoD Components. We expect the detailed analysis using the certified data received from these data calls will begin in earnest in the summer. The Secretary of Defense's recommendations to the 1995 Base Closure and Realignment Commission are due by March 1, 1995.

This group will establish the guidelines for the Services to measure the economic impact of base closure alternatives, including cumulative economic impact from past BRAC actions. The group will also analyze DoD Component recommendations under these guidelines and develop a process for analyzing alternative closures or realignments necessitated by cumulative economic impact considerations, if necessary and appropriate. This group is also examining whether the cost to other Federal Agencies should be included in DoD's BRAC analysis.

SUMMARY

Both the planning for BRAC 1995 and the implementation of past BRAC actions are dynamic processes. Each has multiple challenges as we struggle to define a long-term affordable base structure and learn how to deal with the unique circumstances of each base closure community.

I appreciate the support which this Committee has provided the Department in this difficult task and ask for your continued support, and counsel. Change is rarely easy, and the changes we are asking of the Military Departments and base closure communities are daunting. We look forward to working with you on this challenge.

Document Separator

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
-- REUSE HEARING --
SH-216 HART SENATE OFFICE BUILDING
MARCH 16, 1995

MORNING HEARING (9:00 A.M)

PANEL ONE: Senator David Pryor (D-AR)

PANEL TWO: Mayor
The United States Conference of Mayors

Councilmember John Maxwell (Myrtle Beach, SC)
National League of Cities

Commissioner Doug Bovin (Delta County, Gladstone, MI)
National Association of Counties

City Manager Walter V. Graham (Vallejo, CA)
International City/County Management Association

PANEL THREE: Mr. Brad Arvins
National Association of Installation Developers

Mr. William Tremayne
Business Executives for National Security

AFTERNOON HEARING (1:30 P.M.)

PANEL ONE : Honorable Joshua Gotbaum
Assistant Secretary of Defense (Economic Security)
Department of Defense

Ms. Sherri Goodman
Deputy Under Secretary of Defense (Environmental Security)
Department of Defense

Mr. Alan Olsen
Director of Air Force Base Conversion Agency
Department of the Air Force

Colonel Dennis Cochrane
Chief, Base Realignment & Closure Office
Department of the Army

Rear Admiral Patrick Drennon
Director of Facilities & Engineering Division
Department of the Navy

PANEL TWO: Honorable William Ginsberg
Assistant Secretary of Commerce (Economic Development)
Department of Commerce

Mr. James Van Erden
Administrator, Work-Based Learning
Department of Labor

Mr. Timothy Fields
Deputy Assistant Administrator (Solid Waste & Emergency Response)
Environmental Protection Agency

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STATEMENT OF

MS. SHERRI W. GOODMAN
DEPUTY UNDER SECRETARY OF DEFENSE
(ENVIRONMENTAL SECURITY)

BEFORE THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON INSTALLATIONS
AND FACILITIES

ENVIRONMENTAL CLEANUP PROGRAM
APRIL 19, 1994

ON
FYI
Return to
me for file
Bob

NOT FOR PUBLICATION
UNTIL RELEASED BY THE
COMMITTEE

Good afternoon, Mr. Chairman and Members of the Committee. On behalf of Secretary Perry, thank you for inviting testimony from the Department of Defense on environmental cleanup.

I would like to begin by putting DoD's environmental cleanup program in the context of DoD's overall environmental security program. Then I will outline steps we have taken in the past year to improve the quality and speed of cleanup projects and to make the program more cost effective. Finally, I will discuss the Administration's proposed Superfund reauthorization reforms and detail our budget request for FY95.

The DoD Environmental Security program was created by the President and the Secretary of Defense to address this administration's new commitment to Environmental Security.

The program has seven major goals:

- ensure DoD operations **comply** with environmental laws;
- **clean up** and reduce risk from contaminated sites;
- be responsible **stewards** of the land DoD holds in public trust;
- **prevent pollution** at the source whenever possible;
- promote development of dual-use environmental **technologies**;
- improve the condition of DoD's **installations** and infrastructure; and,
- protect the **safety and health** of our military and civilians.

In the past, DoD's environmental stewardship has been limited to cleaning up contamination from past activities and complying with minimum requirements. Our new mission is to incorporate sound environmental practices into DoD's operations in order to protect the environment and avoid future costs. That is why we are placing special emphasis on three areas of environmental security: pollution prevention, technology and conservation.

Through pollution prevention, we hope to reduce DoD's use of hazardous and toxic substances that are both harmful to the environment and increasingly costly to use and dispose, Through technology, we hope to leverage our investments and leapfrog to better business practices. Through conservation, we preserve the natural resources that are a source of strength for our nation.

While we have placed a new emphasis on these areas, the Department is obligated to remedy environmental contamination resulting from decades of operations in the United States. Like any business in the United States today, DoD must clean up past contamination for which it is responsible.

A post cold-war legacy. During the cold war, the U.S. did not place a high priority on environmental protection. This administration recognizes that the post-cold war era requires a new approach to solving DoD's environmental problems: a common sense approach that ensures DoD is a careful steward of human health and the environment and the public's money. Secretary Perry is committed to the course the President has set; he recognizes that there must be a strong economy if we are to protect the nation, and that a healthy environment is essential to economic development and quality of life.

The cleanup program today. In 1987, three years after the Congress established the Defense Environmental Restoration Program, the Department reported 5,165 potentially contaminated sites on 739 installations. During the years 1987-1993, the number of contaminated sites identified increased more than threefold, covering more than twice as many bases. In the DoD's 1993 annual report to Congress, the Department listed 19,694 potentially contaminated sites on 1,722 military installations located in the U.S.

Most of the work identifying contaminated sites is complete. While the number of sites increased by almost 240% from 1987 to 1990, there was only a 12% increase in sites identified from 1990 to 1993. Studies, interim remedial actions, and cleanups taken through FY93 have reduced the number of sites to 10,439. Last year the Department reported cleanup complete at 416 sites -- at the end of Fiscal Year 1993, that number grew to 571, **an increase of 37%.**

The number of DoD sites listed on the National Priorities List (NPL) has also increased dramatically. Between 1987 and 1993, NPL sites at active DoD locations increased from 29 to 94. Similar to the rate of increase for non-NPL sites, the largest increase in NPL sites occurred from 1987 to 1990 when the number of sites jumped from 29 to 89. Currently there are 16 military installations proposed by EPA for the NPL. In addition, 15 of our formerly used defense sites are listed on the NPL.

The Department has contaminated sites in all 50 states. States with the largest defense operations also have the most sites. California has over 2,000 contaminated sites on approximately 150 installations; Texas has the second highest number -- about 1,000 sites on 88 bases. New York, Virginia and Pennsylvania have contaminated sites ranging from about 670 to 785.

DoD also has contaminated sites overseas. Cleanup is primarily performed at overseas sites to protect imminent and substantial threats to human health and safety. For other environmental concerns, cleanup is conducted in accordance with the availability of funds. This policy applies to both operating bases and those scheduled for return to the host nation. We are now working with the Services to develop a uniform policy to clean up operating bases overseas. No additional cleanup is envisioned for bases being returned to the host nation, (unless it poses an imminent and substantial threat). Indeed, any cleanup at closing bases would be performed only with support funding from the host nation.

A wide spectrum of contaminants pollute defense installations, some of which are unique to the military, but most of which are commonly found on civilian properties. The most common contaminants include:

- Fuels and solvents - such as gasoline, diesel and jet fuel, degreasers and cleaning compounds -- are found at about 60% of DoD sites.

- Toxic and hazardous waste - including heavy metals such as lead and mercury, explosive compounds, caustic cleaners, dyes, paints and strippers -- are a problem at about 30% of DoD sites.

- The remaining 10% of DoD sites consist of unexploded ordnance (approximately 8%) and low level radioactive waste such as electron tubes and self-luminous dials, gauges and circuit breakers (approximately 2%).

Let us now turn to a discussion of program cost. Through FY93 about $7.9 billion (including BRAC) has been invested in the cleanup program. In 1985, DoD estimated the cost to complete the program at between $11 and $14 billion (1987 dollars). In 1991 that estimate jumped to $24.5 billion. We are currently updating the total cost and the new estimate will cover all program activities, including studies, cleanup, and long-term operation and maintenance of remedial systems at installations and formerly used defense sites, DoD development, and administrative costs.

The new estimate, intended as a planning tool for DoD, will be a "top down" determination rather than "bottom-up," or generated from the installation level. The review will provide a high and low range for total program costs based on using various cleanup technologies. For example, innovative soil treatment technologies such as landfarming can provide significant cost savings over conventional technologies such as incineration and landfilling. DoD is working to use innovative technologies whenever feasible. We expect to complete this budget

review by this summer.

Many factors have contributed to this increase in cleanup costs, including the large number of sites identified since 1988 and increasingly strict cleanup standards. Additionally, the accuracy of DoD cost estimates has improved over the past decade; the Department now knows far more about the nature and extent of contamination and the cost of remediation techniques under different conditions. We believe that future cost estimates will not increase at the same rate because the rate of new sites identified has slowed, cleanup costs are better understood, and new measures are being implemented to improve the cost-effectiveness of the program.

In addition, I want to mention that DoD is currently reviewing the Department of Energy's recent "benchmarking" study which compares DOE cleanup costs with other Federal agency and private sector programs and targets areas for improving cost-effectiveness and performance.

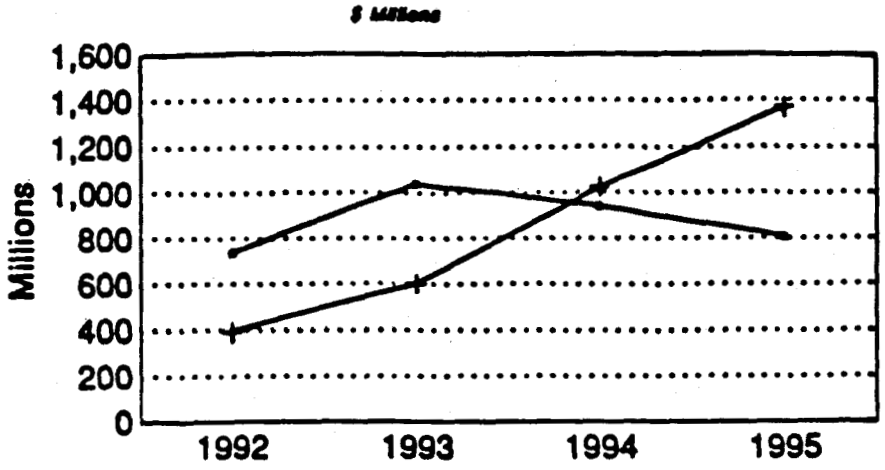
The results are encouraging. We are now determining how relevant these findings are to the DoD cleanup program. We are also considering a separate benchmarking study that would focus on DoD operations.

The budget history of the Defense Environmental Restoration Program illustrates the growing importance of DoD's cleanup effort. In 1984, DoD spent $150 million on environmental restoration; in 1994 DoD will spend over $2.5 billion to clean up sites, including those at bases that are scheduled to close under the Base Realignment and Closure actions. In all, about $7.9 billion--including $6.6 billion from DERA and $1.3 billion from the Base Realignment and Closure Accounts--has been invested in the DoD cleanup program through FY93.

The cleanup program is now conducting more cleanup than studies. In the past, most of DoD's cleanup costs have been spent on identification and analysis of contaminants. This fiscal year DoD expects to invest more in actual cleanup work than on studies and analysis (see attached chart). And, for Fiscal Year 1995, 63% of DoD's investment will be for the three cleanup phases: remedial design, remedial action, and interim remedial actions.

DERA Trends

$ for Cleanup vs $ for Identification and Analysis



Ident & Analysis —	740	1,039	941	810
Cleanup +	389	600	1,024	1,370
Total	1,129	1,639	1,965	2,180

Although the program is now transitioning from the study phase to actual cleanup, significant cleanup progress has already been made. By the close of FY93 DoD cleaned up 571 sites, completed 1,015 interim actions at 865 sites, and is now working on 395 interim actions at another 367 sites.

I would now like to outline steps DoD is taking to optimize the quality, speed and cost of the cleanup program. The Department -- in partnership with federal, state and local regulators as well as industry and the public -- is committed to changing current practices in order to reduce environmental risk, achieve faster cleanups, and buy the maximum cleanup for the public's tax dollars.

During the past year, DoD has moved the program to a more action-oriented approach that focuses on early, interim actions; the use of innovative cleanup technologies; and eliminating bureaucratic red tape. Specifically, DoD has:

- Structured an **environmental technology** program to target the most pressing cleanup needs;
- Used "lessons learned" from completed sites to design **generic remedies** for solving common cleanup problems;
- Shortened the time to complete **identification and analysis** phases of the cleanup process;
- Focused more effort on the use of **interim remedial actions** to stabilize

contamination and reduce immediate risks to the population at environmental "hot spots;"

- Promoted early and effective involvement of major **stakeholders** in the decision-making process, especially affected communities and federal, state, and local regulators;

- **Superimposed the investigation and cleanup phases** -- for example, initiating preliminary design activities while decision documents are being finalized; and;

- Conducted **concurrent review of documents** with the regulatory agencies to compress review schedules.

Partnering is a critical ingredient to optimize the DoD cleanup program. It includes actively working to involve other federal agencies, tribal and state governments and associations, and environmental and citizen organizations in the decisionmaking process. We are working in a variety of ways to cultivate the types of relationships that contribute to mutual trust and cooperation to ensure the success of our program. For example:

- DoD is working with the **Federal Facilities Policy Group,** a White House-led initiative aimed at developing a comprehensive approach to the Federal government's cleanup problems. The objectives of this group are identical to those that I have outlined for DoD's cleanup program: to reduce risks, speed cleanups, save costs, and improve stakeholder involvement.

- DoD has established a partnership with the **Agency for Toxic Substances and Disease Registry (ATSDR) and the National Oceanic and Atmospheric Administration (NOAA)** to ensure we are meeting our public health and ecological stewardship responsibilities.

- DoD has reconvened the **Defense Environmental Response Task Force** whose diverse membership is addressing BRAC cleanup issues.

- DoD is a member of the **Keystone Federal Facilities Environmental Restoration Dialogue Committee** charged with developing consensus recommendations to improve the Federal facility cleanup decisionmaking process and ensure that the priorities and concerns of all stakeholders are represented.

- At closing installations, DoD has established **Base Closure Teams** (BCT), representing DoD, EPA, and state officials, to accelerate cleanup actions.

- We have begun a cooperative initiative with the **Association of State and Territorial Solid Waste Management Officials** to review DoD's implementation of the Formerly Used Defense sites program, the Defense-State Memorandum of Agreement program, and cleanup at closing bases.

DoD strongly supports public involvement in our cleanup program. We believe that a strong partnership with communities will improve the cleanup process and result in faster, more cost-effective cleanups. DoD has had great success with the Technical Review Committees (TRCs) we have established at installations with cleanup activities. TRCs provide DoD, EPA, State representatives and citizens an opportunity to meet on a regular basis to review program progress and discuss issues. We now have TRCs at over 200 installations.

In accordance with the Keystone Federal Facilities Environmental Restoration Dialogue Committee recommendations, we are currently expanding the TRC concept to provide for even greater citizen input. We are now setting up Restoration Advisory Boards (RABs) at all closing bases undergoing cleanup actions. Like TRCs, RABs will be comprised of DoD, EPA, state and community members and will be jointly chaired by DoD and a community member. They will serve as a focal point for exchange of information, planning, and resolution of issues. A special effort will be made to include members representing a cross section of community interests and meetings will be open to the public to allow all views to be heard. DoD is currently working with the Environmental Protection Agency to develop joint guidance and training to establish RABs.

The Fast Track Cleanup Program represents the cutting edge of DoD's new approach to environmental cleanup. This program, announced by President Clinton on July 2, 1993, is part of a five part initiative that aims to speed the economic recovery of communities where bases are scheduled to close. The five part program integrates economic development, transition assistance, and environmental cleanup to allow early reuse of the base's assets. The primary elements of the program include:

- job-centered property disposal;
- more robust planning grants to communities;
- transition coordinators at major bases;
- easier access to transition and redevelopment assistance; and,

- fast track cleanup.

The Department is now well under way in implementing the Fast Track Cleanup program. On September 9, 1993, Dr. Perry issued the Fast Track implementing guidance to the Military Departments. The guidance was developed in cooperation with the EPA after consultation with several states and the National Association of Attorneys General. Elements of this guidance include:

- **Cleanup teams:** Teams with representatives from DoD, EPA, and state environmental professionals will be created at each major closing base to cooperatively review all cleanup plans. In a series of training workshops held throughout the country, DoD brought these teams together this past year to learn how to conduct a "bottom-up review" of existing environmental efforts and to prepare a BRAC cleanup plan. These plans will be used to identify requirements and better program DoD resources to support the twin goals of environmental cleanup and economic reuse.

- **Parcelization:** Under the authority of the Community Environmental Response Facilitation Act, DoD is making available clean parcels of land for immediate transfer and reuse by local communities while contaminated parcels continue to be cleaned. To date, DoD has identified several hundred parcels for potential transfer, and regulatory agencies are expected to complete their reviews shortly. To speed the availability of parcels that require some level of cleanup, DoD has worked in partnership with EPA to develop model lease language. These leases provide communities with the opportunity to achieve economic reuse while cleanup continues.

- **NEPA Reviews:** DoD is accelerating the process for conducting environmental impact reviews under the National Environmental Policy Act. The Department is committed to completing a NEPA review outlining alternate property uses within 12 months from the date a community submits a final reuse plan. DoD will consider the community's plan as the preferred use for the property.

- **Indemnification:** DoD has implemented procedures to ensure that any future owners and lessees of property at closing bases are indemnified from potential liability for DoD's past contamination. As provided by law, DoD believes these provisions will speed the cleanup and transfer of property at closing bases.

- **Restoration Advisory Boards:** Boards consisting of DoD, EPA and state and local community representatives reflecting diverse interests are being formed at all major closing bases to serve as a forum for public comment and

exchange of cleanup program information.

We believe Fast Track is a good model for how all DoD restoration activities should be conducted in the future. Fast Track demonstrates that cleanup at Federal facilities can be done in a way that optimizes our goals of protecting human health and the environment, speeding the cleanup process, and making the program cost-effective. I intend to work hard in the months ahead to ensure that the Fast Track lessons are successfully applied to cleanup at active bases.

DoD also reconvened the Defense Environmental Response Task Force in 1993 which is made up of senior representatives from DoD, EPA, and other federal agencies; a state environmental protection agency (as appointed by the National Governors Association); the National Association of Attorneys General; the Urban Land Institute; and a public interest environmental organization. The Task Force convened on September 23, 1993 with the charter to review recommendations and examine progress made since the 1991 Task Force, to monitor and guide the fast-track cleanup program, and to continue the process of building a new environmental partnership. The task force held its second meeting in California on January 26, 1994.

To assist our managers in the field, and to reduce the cost of the program, DoD is capitalizing on "lessons learned" at cleanups across the country. We have established a system to capture, classify, evaluate, and disseminate good business practices in categories such as public involvement and teaming, site characterization, and contracting and cost control. The goal of this program is to compile an information resource for remedial project managers and Base Realignment and Closure cleanup team members to enhance their ability to make on-site, real-time cleanup decisions.

New legislative authorities would also enhance DoD's efforts to clean up contamination. The Department is strongly supporting the Administration's proposed reforms to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), commonly known as "Superfund." In particular, we support the following changes in the Superfund Reform Act of 1994 (HR3800):

- **Future land use:** By considering the future use of land in the remedy selection process, DoD can provide remedies commensurate with actual use. This consideration is critical for closing bases that will likely be used as industrial facilities or airfields;

- **Cost consideration:** After ensuring that a remedy will protect human health and the environment, DoD supports considering cost-effectiveness in

selecting among alternative remedies;

- **National cleanup standards:** Designating minimum cleanup standards for the most common site contaminants will help provide consistency throughout the country. We support allowing DoD to tailor standards using traditional risk assessment methods for uncommon contaminants or to fit specific natural conditions;

- **Elimination of "relevant and appropriate requirements":** DoD supports "applicable" cleanup standards but eliminating "relevant and appropriate requirements" which often result in the application of overlapping and inconsistent remedies and standards.

- **Generic remedies:** DoD supports the development of generic remedies to speed cleanup and improve the cost-effectiveness of cleaning up common contamination problems.

DoD is working hard to implement many necessary reforms to our cleanup program now, but the full measure of cost savings will not be available until Congress completes work on the Superfund Reform Act of 1994. We applaud this effort and encourage your strong support.

Let me now turn to our FY95 request for DERA. DoD is requesting $2.2 billion to fund our legally mandated cleanup requirements, down from last years' request of $2.3 billion. The largest increase in our FY95 request--20%--is for remedial design and remedial action -- the actual cleanup stages of the Defense Environmental Restoration Program (DERP). DoD is requesting $1.4 billion for remedial design and action, and interim remedial actions, compared to $1 billion estimated for FY94. The balance of our request -- $800 million -- supports studies legally required for investigation and analysis before we can begin cleanup ($419 million); management costs to oversee the program ($169 million); workyears ($95 million); third-party sites ($97 million); and, quick payback cleanup technologies ($30 million).

Cleanup work at closing bases is funded by the Base Realignment and Closure (BRAC) Accounts. In real terms, the total request for cleanup in DERA and BRAC for FY95 is approximately the same as last year (see chart).

	FISCAL YEAR 1994		FY 1995
	CURRENT $M	CONSTANT '95 $M	
DERA	2,309	2,370	2,180
BRAC	282	289	508
TOTAL	2,591	2,659	2,688

Congress recently received DoD's Defense Environmental Restoration Program Annual Report. I encourage you to look it over carefully. It has been transformed into a much more user-friendly document that provides, in addition to the traditional data on the status of last year's cleanup activities, detailed information on installation progress planned for the next two fiscal years including, an expected completion data and estimated costs from FY 1996 through completion. This report should provide Congress with an even clearer perspective of where money is being spent and what we are getting for our investments.

In conclusion, DoD has one of the most mature cleanup program of any Federal Agency. This is good news because we are well underway with cleanup actions at many DoD sites. But it is also a difficult position as we must discover the new frontiers for program improvements.

We have worked hard to ensure our budget requests incorporate the program efficiencies for which we now have legislative authority. I must caution, however, that even as the program makes progress, DoD will not complete cleanup at most sites before the next century. DoD's ability to continue with a sound cleanup program requires Congress to support fully the funds the President has requested. Therefore, DoD and Congress must continue to make a fundamental commitment to budget for and clean up the legacy of this nation's Cold War operations.

This concludes my remarks. I would be pleased to respond to any questions.

A LOOK AT . . .

Downsizing Defe

When Closed Means Open

How the Pentagon Is Backing Off Its Pork-Barrel Pledge

By Stanley A. Weiss

THIS YEAR was supposed to be the "mother of all base closings." But something happened on the way to the battle.

Originally designed as a clever, and necessary, way around the problem of trying to close unneeded military installations long kept open by pork-barrel politics, the successful seven-year base-closing program is in danger of going out with a whimper instead of a bang.

And it's too bad. The decision to scale back the Pentagon's list for the fourth and final round of base closings is penny wise and dollar foolish. Investing today in the upfront costs of closing obsolete military facilities will yield taxpayer dividends tomorrow four times as great.

So what happened? Why is a plan that once aimed at closing an additional 100 major military bases now targeting only a third that many? The answer is not a profile in courage. Ultimately, the Pentagon decided that closing that many bases would be too difficult and too costly in the near term.

Political calculation—by both the White House and Congress—also played a role. California, home to the largest number of military installations and the richest store of electoral votes, was a major focus of past base closures. This time, it was hardly nicked. Similarly, South Carolina lost installations in prior years but is now slated to gain. It is home to the chairmen of both congressional committees that control the Department of Defense budget. Neither lawmaker has been a fan of the base-closing process from the beginning.

Call it coincidence, call it fairness, call it wasteful. As a result, the size of the military's overhead will continue to be seriously out of whack. Since Cold War peak levels, the defense budget has decreased by more than 40 percent, the size of the military force has been reduced by a third and procurement cut by two-thirds. But even after three rounds of base closings, the Pentagon's "infrastructure"—bases, depots, shipyards and laboratories—has gone down by less than 20 percent.

The impetus for the base closings started building more than a decade ago, when the Pentagon found itself with a military base structure that far outstripped the size of its forces. By the mid-1980s, the country had 3 million men and women under arms, but enough bases to support 12 million troops. Some bases were built for the Indian Wars; one had a moat.

Yet every time the Pentagon tried to shut down an obsolete base, it ran into the informal quid pro quo on Capitol Hill—I won't vote to close your base if you don't vote to close mine. The result: Not a single major base was shut down until 1990. As the Cold War drew to an end and the military became smaller, the problem only grew. Fewer troops should have meant fewer bases.

Obviously, some way was needed to take the politics out

are closed or restructured, the Defense Department believes the savings will grow to more than $4 billion a year. This last and final round, announced by Defense Secretary William Perry earlier this month, calls for closing 33 major bases and scores of smaller ones for additional savings of $1.8 billion annually.

But getting congressional approval to close bases has proven far easier than actually carrying out the plan. Communities, addicted to the military's presence, mount high-profile, sophisticated public relations campaigns to save the installations. They lobby their representatives and advocates in the military and the White House. Time and energy that should be put into finding new commercial uses for bases go instead into new schemes to keep alive sites that were supposed to close completely.

The fear of losing jobs helps drive this destructive cycle. What is discouraging is not just the return of politics as usual but that the community fears are largely misplaced. A Defense Department study of almost 100 bases shut down during the 1960s and 1970s showed that when the bases were converted for civilian use, more jobs were created than were lost in affected communities. Former military facilities were transformed into 14 high schools, 32 vocational schools and junior colleges, 12 four-year colleges, 42 municipal airports and 75 office and industrial parks. It wasn't easy. It took planning, persistence and work. But the payoff was a more stable, prosperous local economy.

ILLUS

When England Air Force Base appeared on the list, the town of Alexandria, La., through foresight and planning, figured out a way to replace the lost jobs and income. The one-time fighter base now houses a civilian airport and industrial park with 15 occupants, generating far more employment and revenue for the community than the base ever did

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alignment Commission. Composed of private citizens, the commission's task was to identify bases that could be closed without regard to politics.

Here's how it works. The commission examines the Pentagon-generated list of possible base closures, recommends those it feels should be shut down or consolidated. No bartering, no gamesmanship. The theory is that as long as the closings are spread equally around the country and Congress has to vote up or down on the entire package, the base closures would sail through.

Indeed, they have. The first commission in 1988 resulted in agreement to shut down 12 major facilities, ranging from Cameron Station in Alexandria, Va., to the Presidio in San Francisco. The Pentagon estimates this first round is already saving the taxpayers some $750 million annually. In 1991 and 1993, an additional 55 major bases and many smaller ones made the list. When the hundreds of installations their closure.

Unfortunately, the communities rarely get much help from the federal government. Current law stipulates that the Pentagon and other federal agencies get first call on what to do with the bases scheduled for closing. If the federal government passes, the bases are offered to local governments or nonprofit agencies. Only as a last resort are closed military facilities offered for sale to private interests. No wonder base closings have been fought, at least initially, by nearly every community.

As the base-closing process enters its last and most important round, the administration and Congress should rethink this policy to allow local communities, not Washington, to have first call on bases scheduled to be closed. And, as Defense Secretary Perry wisely suggested, there should be still another round of base closings.

Ensuring that bases are indeed closed does more than save money. At issue is the nation's security: Will defense dollars go for guns or pork? Military readiness or obsolete bases? The national interest or local self-interest?

Stanley Weiss is founder and chairman of Business Executives for National Security.

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The Shipping News

How the Bath Iron Works Is Trying to Kick Its Cold War Habits

By Sanford Gottlieb

A DRAMATIC discovery has hit some defense firms seeking commercial markets: Workers have brains as well as brawn. The Bath Iron Works (BIW) in Maine, a key naval shipyard, has made its workforce a partner in relearning the skills of commercial shipbuilding.

A job with BIW is highly prized by its 8,700 employees. Their wages and benefits are among the best in the state. They are proud of their skills and the company's 110-year shipbuilding history, during which BIW has built 450 ships—half for the U.S. Navy. But BIW was transformed during the Reagan era; the administration decided to abandon commercial subsidies and to create a 600-ship Navy. Within a few years it became totally defense-dependent.

The early 1990s found BIW in a bind. While military spending was declining, foreign companies were making great strides in building commercial vessels. The 600-ship Navy would never be built, but BIW was saddled with a heavy fixed overhead from big military programs like the construction of Aegis destroyers. With no civilian work in sight, BIW management made two bold decisions: Try to break into the global commercial shipbuilding market, and ask employees to help transform the company's work habits.

The shift would be difficult. Commercial ships are mostly steel, with some relatively easy outfitting. Producing Navy combatants, however, is 75 to 80 percent complex outfitting (state-of-the-art weapons, protective devices, navigation). Under military specifications, it takes at least six times as long to build an Aegis destroyer as a commercial cargo ship. How could BIW hope to compete in the crowded world of modern commercial shipbuilders?

Led by its progressive president and CEO, Duane "Buzz" Fitzgerald, the Bath Iron Works moved to reinvent itself. First, it won a government grant enabling it to study commercial shipbuilding abroad and bring the know-how home to Bath. Second, BIW signed a pioneering labor-management agreement with its production and administrative employees that established joint decision-making at every level.

Through a two-year, matching-fund grant from the Pentagon-led Technology Reinvestment Program, BIW is working cooperatively with Japanese and Finnish shipyards and two shipping lines to learn the latest commercial shipbuilding processes. By the end of 1995, BIW expects to produce two new designs, one for a cargo ship that can carry cars in one direction and refrigerated food on the return trip, and another that would carry trucks and cars. Great American Lines and American Automar, partners in the grant, could purchase the newly-designed ships.

In October, a BIW team from both labor and management visited commercial shipyards in Finland and Scotland and are now brainstorming how to apply what they learned. One of the participants in this collaborative process is John "Stoney" Dionne, president of International Association of Machinists (IAM) Local S6, which represents 5,700 BIW production workers. One of the lessons of the European trip, Dionne reports, is that BIW is doing unnecessary repainting.

Under the old pattern of top-down decision-making in the yard, however, such grass-roots recommendations, however valuable, would have been blocked if they were made at all. As Fitzgerald puts it, American business "assumed all wisdom came from the top, all the doing from the bottom."

Today, under the three-year contract ratified in August, BIW and its production and administrative employees commit themselves to cooperation in areas including technology, training, health insurance and strategic and marketing plans. "Where joint approval is required," states the contract, "implementation will not occur until consensus is reached. Reasonable options must be explored. You cannot just say 'no'."

Problems that became grievances in the past, says Fitzgerald, are now dealt with on the spot through joint teaming. Management still assigns work and supervisors help bring in the supplies the workers need, Dionne explains, but "workers determine how it's done, with less supervision."

Sanford Gottlieb is writing a book on the defense industry and defense conversion.

BIW's workforce is pa
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President Clinton spok

revitalization. The Agency's role in accelerating cleanup of closing and realigning bases will be carried out concurrently with its responsibility under various statutes and other authorities to ensure compliance with requirements that protect human health and the environment. The resources from DoD will not be used to support any enforcement actions at these bases.

I will now focus on some of the primary statutory requirements related to cleanup and property transfer and then turn my attention to accomplishments.

Under CERCLA, Presidential delegation (Executive Order 12580), and other authorities, DoD is responsible for cleaning up DoD facilities consistent with the requirements of section 120 of CERCLA. The Congress has charged each federal department with CERCLA compliance in the same manner and to the same extent as any private entity, and charged EPA with maintaining a Federal Agency Hazardous Waste Compliance Docket and with listing appropriate Federal facilities in the NPL. Of special note for base closures, under section 120(e)(1), DoD must consult with EPA and appropriate state authorities regarding the remedial investigation and feasibility study (RI/FS) for a facility. Moreover, under section 120(e)(2), EPA must review completed RI/FS's and DoD must enter into an interagency agreement (IAG) with EPA (frequently, affected states are included in the IAG) which selects the remedial action that needs to be taken, establishes a schedule for completion of the remedial action and arranges for long-term operation and

why significant?

maintenance of the facility. Finally, under section 120(e)(4), if DoD and EPA are unable to agree on the remedy for a site, EPA selects the remedy.

To assure that EPA will have an adequate basis on which to evaluate DoD's proposed remedy, EPA and DoD have established IAGs at nearly all of DOD's NPL sites during the RI/FS phase. IAGs provide enforceable schedules for the major tasks and establish a site-wide sequence for planned activities. Although base closure does not change DoD's obligation to perform all necessary cleanup actions, it focuses attention on the need for timely reuse of certain portions of the installation. In some cases timely reuse may require modification of IAG schedules.

Congress has responded to concerns that information on environmental conditions at closing bases be developed rapidly. The National Defense Authorization Act for Fiscal Years 1992 and 1993, P.L. 102-190, imposed deadlines for the submission to EPA of draft final RI/FSs for closing bases on the NPL. The deadlines were December 5, 1993, and December 5, 1994, for Round I and II closures, respectively. Extensions were granted in a number of cases.

Not only do the study and cleanup requirements continue to apply at closing and realigning bases, but CERCLA section 120(h) places additional obligations on Federal agencies when they transfer property. CERCLA section 120(h) affects the transfer of federally owned property on which any hazardous substance was

stored for a year or more, or known to have been released or disposed of on the property. All contracts for sale or other transfer must include notice of the type, quantity, and date of the hazardous substance storage, release, or disposal. Therefore, when DoD intends to transfer property, it must examine its records to determine if there is evidence of storage, known release, or disposal of hazardous substances on the property. If so, DoD must provide notice to any transferee, including a lessee.

Another significant property transfer requirement under the Superfund law is applicable whenever any federally-owned property impacted by hazardous substances is transferred "to any other person or entity" -- that is, a party other than the federal government. Under CERCLA section 120(h)(3), transfer by deed must include a covenant by the United States that all remedial action necessary to protect human health and the environment has been taken prior to conveyance and include a covenant to undertake any further remedial action if found to be necessary. The covenant requirements do not apply to leases and other non-deed transfers. Therefore, as long as the notice requirements are satisfied, and the lease is structured to assure that the planned use will not interfere with the remediation of the facility, interim uses via lease may facilitate the economic transition.

In October 1992, Congress passed the Community Environmental Response Facilitation Act (CERFA), P.L. 102-426, amending CERCLA Section 120(h)(3) to facilitate reuse. CERFA requires

identification of uncontaminated parcels and allows property to be deeded, upon demonstration that an approved remedy is operating properly and successfully, while long term cleanup continues.

Although CERFA amends section 120(h)(3) of CERCLA so that a parcel may be transferred by deed during the remedial action if the approved remedy has been constructed and its "proper and successful" operation is demonstrated to EPA, a period of several years may be required to reach that point in the cleanup process. (1)

Leasing property has been acknowledged to provide an effective means of facilitating reuse prior to the completion of cleanup. The FY94 Defense Authorization Act directed EPA and DoD to establish a Memorandum of Understanding (MOU) to assure an adequate regulatory role in the leasing of parcels at closing bases. (A copy is provided for the record.) The MOU acknowledges that a DoD guidance document was developed with EPA participation which provides for a consultation process in the development of an Environmental Baseline Survey (EBS) and a Finding of Suitability to Lease (FOSL) which includes any restrictions or limitations on reuse necessary to protect human health and the environment. The policy directs the military services to include in each lease and sublease a series of model provisions intended to assure that the lease will not impede cleanup. The policy also provides the public and the proposed tenant with access to the information contained in the EBS and FOSL.

(1) why several? which parts take longest? i.e., how much of that time is sampling, analysis, + designing versus actually moving dirt?

~~what if the lease restricts don't go far enough & injury occurs? who~~

~~what rest~~ restrictions to be enforced?

How are lease ~~provisions~~

Is this a problem?

CERFA also requires that DoD identify "uncontaminated parcels" based on an evaluation of data from a specified series of sources. The identification must consider petroleum products as well as CERCLA hazardous substances and is not considered complete until concurrence by EPA for real property which is part of a facility listed on the NPL, or by the State in the case of other real property. It is important to note that parcels which do not meet the CERFA criteria may still be eligible for transfer by deed.

EPA has determined, as a matter of policy, that in order to use CERFA to identify parcels with substantial reuse potential, (the stated intent of Congress), there will be circumstances in which a parcel can properly be identified as "uncontaminated" even though some limited quantity of hazardous substances or petroleum products have been stored and may have been released on the parcel. The policy memo identifies housing areas, stained pavement, and some areas where pesticides have been applied as examples of parcels where the activity associated with storage or release if unlikely to create a condition which would pose a threat to human health or the environment. EPA is working with the States to encourage them to adopt a similar approach at non-NPL installations closed under BRAC 3 where parcels are to be identified by March 27, 1995.

GAO report complained that not enough id'd. prop'l will 9 of with prop's for BRAC 3 installations be claimed? why or why not?

At installations closed under BRAC 1 and 2, parcel identification was mandated by April 1994. EPA concurred in the identification of 213 parcels totalling over 37,000 acres at 12

installations listed on the NPL. Our Regions are currently working with BRAC 3 installations to complete the identification of CERFA parcels at these installations. While CERFA does not require EPA concurrence in decisions to transfer uncontaminated parcels, the parcel identification process (with EPA or State concurrence, as appropriate) will provide a measure of certainty for prospective purchasers.

To summarize, returning closing bases to productive use requires that a parcel or facility be classified as:

(a) an uncontaminated area;

(b) a contaminated area that has a remedy in place and operating properly and successfully so that it can be deeded under CERCLA section 120(h)(3); or

(c) a contaminated area that has not yet been remediated, but may be appropriate for commercial reuse under a lease.

EPA will be involved in these efforts.

I will now highlight accomplishments in working with DoD and communities to expedite reuse of closing bases.

EPA supported the development of, and participated in, the BRAC Cleanup Team training courses held around the country in late 1993. The BRAC Cleanup Teams completed BRAC Cleanup Plans for the 77 fast track bases by May 1994. DoD required BRAC Cleanup Plans for all fast track bases. The objective of the DoD-wide BRAC Cleanup Plan initiative was to develop a comprehensive and consolidated status and strategy for expedited environmental

cleanup at each fast track installation so that property reuse can be accomplished in a timely fashion. Reuse considerations were to be factored into the BRAC Cleanup Plans. The Plans are considered living documents and EPA will participate in the updates of the Plans.

To facilitate the process of transferring property by deed, DoD issued guidance in June, 1994, on the environmental review process to reach a finding of suitability to transfer (FOST) for real property under the BRAC process. EPA was involved in the development of the guidance and in the development of a companion guidance, "Fast Track To FOST: A Guide To Determining Whether Property Is Environmentally Suitable For Transfer." The Fast Track to FOST is a guide to organizing and coordinating the evaluation of the environmental condition of real property to determine the property's suitability for deed transfer. The FOST guidance, along with the FOSL guidance mentioned earlier, provide the framework for the BRAC Cleanup Team to identify and document property that is environmentally suitable for transfer or lease, respectively.

I include EPA's April 19, 1994 memorandum, "Military Base Closures: Guidance on EPA Concurrence in the Identification of Uncontaminated Parcels under CERCLA Section 120(h)(4)" as an accomplishment because it furthers Congress' goal of expeditiously transferring uncontaminated real property. It makes it possible for more property to be classified as uncontaminated than would a

more narrow interpretation of CERCLA section 120(h)(4). (A copy is provided for the record.)

An effort on EPA's part to facilitate property transfers that predates the President's Five Part Plan was the issuance of a memorandum on September 22, 1992, "Facilitating Property Transfers at Federal Facilities" related to NPL listing and reuse. (A copy is provided for the record.) I mention this memorandum because I believe there is still confusion about the consequences of NPL listing and its implications for property transfer.

The purpose of NPL listing is to define priorities for further evaluation of the extent and impact of releases. An NPL site consists of all areas potentially impacted by hazardous substance releases.

Closing bases on the NPL were generally listed "fenceline to fenceline" because the Preliminary Assessment/Site Inspection information provided by the military service did not provide adequate documentation for EPA to determine that any particular portion of the installation was not impacted by hazardous substance releases. To ensure that all areas potentially affected by releases were addressed, and to avoid the need for subsequent rulemaking to enlarge the site, the entire installation was included as part of the NPL definition.

DoD has recommended that, as data becomes available, the NPL listing description be amended to "delete" clean parcels. It is generally the policy of EPA not to delete portions of a Superfund

site once it is on the NPL. However, EPA proposed in the September 1992 memo that transfers of property at closing bases could be facilitated by focusing on the extent or "boundary" of the NPL site. EPA suggested that in future listings the site may not extend to the entire installation if sufficient data is provided by the military service. For existing sites there may be cases in which "when a consensus is reached that a given property on a closing base is uncontaminated," EPA should "go on the record that the clean property is not, nor has been, part of the NPL site."

EPA further recognizes that some potential buyers may be concerned about purchasing property that is part of an NPL site. We believe that the best way to address buyers' concerns is to correct some common misunderstandings about CERCLA liability and to highlight certain provisions about the transfer of federally owned property. Whether property is part of an NPL site is unrelated to CERCLA liability. Liability under CERCLA is determined under CERCLA section 107, which makes no reference to NPL listing. NPL listing does not create CERCLA liability where it would not otherwise exist. Rather, liability on the basis of property ownership arises if the property is part of a CERCLA "facility" (i.e., an area to which contamination has come to be located). The fact that a parcel lies within the area used to define an NPL site does not impose liability on the purchaser; liability is imposed by the presence of contamination.

yes, but how should you transmit this news out on the street? How to convince bankers developers to stay on the street.

Even if transferred property on an NPL site which was thought to be clean turns out to be contaminated, or if additional response actions are needed after the property is transferred, CERCLA sections 120(h)(3) and (h)(4) provide the guarantee that DoD will conduct any response actions found to be necessary after the date of transfer. In addition, the transferred property remains subject to Section 120(e) of CERCLA and any existing IAG, which would require the military service to conduct an RI/FS and remedial action to address any newly discovered contamination as part of the response at the site.

EPA Region IX has made a concerted effort to educate lenders about NPL listing and CERCLA liability and has found this education effort to be quite successful in calming their fears about closing bases on the NPL.

Recognizing that many portions of closing bases are currently being utilized for residential, commercial or industrial purposes, EPA and DoD are utilizing measures such as interim leases, when appropriate, to give local communities access to property at closing installations until remedial action has been "taken" and the property could then be transferred by deed. In addition, in order to facilitate economic recovery, there may be instances where Interim Remedial Actions can be undertaken prior to the completion of the installation-wide remedial investigation/feasibility study. These Interim Remedial Actions will reduce the threat associated with contaminants at the site in a timely manner and will provide

an opportunity to deed parcels at an earlier point in time, once the final remedial action has been demonstrated to be operating properly and successfully.

The use of interim remedial actions is one of the many tools for accelerating and streamlining cleanup at federal facilities found in the August 22, 1994 memorandum, "Guidance on Accelerating CERCLA Environmental Restoration at Federal Facilities" jointly signed by EPA, DoD, and the Department of Energy. (A copy is provided for the record.) The BRAC Cleanup Teams employ the acceleration tools on a daily basis.

Use by the BRAC Cleanup Teams of the various guidances I have described advances the goals of the President's program. In addition to cleanup and property transfer issues, EPA is working closely with DoD to enhance the role of communities in the cleanup of its facilities. EPA and DoD issued joint guidelines on the implementation of Restoration Advisory Boards (RABs) on September 27, 1994. RABs are a forum for exchange of information and partnership among citizens, the installation, EPA and the State. They offer an opportunity for communities to provide input to the cleanup process. RABs will serve to improve DoD's cleanup program by increasing community understanding and support for cleanup efforts, improving the soundness of government decisions, and ensuring cleanups are responsive to community needs. The establishment of RABs at all closing bases is a major

Does EPA have to like + plan? Is EPA as beholden to the RAB advice as the DoD is?

accomplishment. In addition, EPA is working with DoD to ensure that it follows Executive Order 12898 on Environmental Justice. We are working with DoD with toward the goal of insuring that no one suffers a disproportionate share of any adverse health and environmental effects associated with the restoration and reuse of closing bases.

Hunters Point Shipyard.

EPA participates in The Defense Environmental Response Task Force (DERTF), a Congressionally mandated interagency task force that was established to study and provide findings and recommendations for expediting and improving environmental response actions at military installations being closed or realigned. During FY 1994 the DERTF met three times at locations where military installations are being closed or realigned. During its meetings, the DERTF received briefings and reports from the public; installations representatives; and five working groups that were established to review the following: leasing, fast track cleanup implementation, environmental baseline survey, future land use, and environmental justice. The DERTF prepared an annual report to Congresss for FY 1994 and continues tc meet in FY 1995. The DERTF report could provide additional useful information for the Commission in its deliberations. One initiative of the DERTF that I am particularly excited about is an effort that is currently ongoing to observe 15 BRAC Cleanup Teams in 10 different states and 8 EPA Regions to determine what contributes to a successful team and what inhibits the team. The results of the observations will

be compiled and analyzed, and lessons learned will be provided to the field.

As you have heard, the relatively young Fast Track Cleanup program has accomplished a great deal. One recommendation I can offer to improve the process is to strengthen the communication link between the BRAC Cleanup Team and the local reuse authority. One key to effective property transfer is early knowledge of the community's proposed future land use to enable the selection of appropriately protective cleanup standards. A workgroup supporting the DERTF and chaired by EPA is looking at ways to improve communication and coordination between the cleanup and reuse groups.

One Superfund Reform Initiative in particular should prove useful to this effort - EPA will complete the land use guidance which will focus the development of remedial alternatives on those that will be consistent with reasonably expected future land uses at sites. The guidance will indicate the kinds of information that are needed to make assumptions about land use and how an assumption about land use can be used in the development of remedial alternatives.

Two other Superfund Reform Initiatives should lead to improvements in consistency and streamlining in site characterization and remedy selection in the Superfund program generally, and at closing bases as well: completion of the soil screening guidance and development of additional presumptive

remedies. The soil screening guidance will help identify portions of contaminated sites that do not require further attention. The screening levels will also be useful in streamlining the baseline risk assessment. Presumptive remedies are standardized remedies for certain types of sites and are based on scientific and engineering analyses performed at similar Superfund sites.

As EPA and DoD continue to work together to implement CERFA, and BRAC 4 bases are added, we will be challenged, particularly in the resource arena, to support a partnership which will:

- o provide timely identification of uncontaminated parcels;
- o provide timely concurrence in the identification of uncontaminated parcels;
- o increased coordination of environmental and economic efforts;
- o jointly foster acceleration efforts; and
- o jointly pursue appropriate interim remedial measures so that property can be deeded following DOD's demonstration that a remedy is operating properly and successfully.

Working with the states and local communities, EPA and DoD can assure that closing bases are safe for new productive uses. We can achieve this goal, in part, by improving public confidence that the facilities are ready for reuse.

EPA and DoD endeavor to be highly sensitive to public interests and potentially conflicting economic concerns, and comply with a wide range of statutory requirements. We remain committed to the prompt return of property at closing military installations

to safe and productive reuse while adequately protecting human health and the environment.

Realigning the Defense Department's base structure is work of historic proportions. Two of the defining movements of the late 20th century are conversion from the Cold War and growing appreciation for environmental values. We have the opportunity to be part of both movements at the same time. We at the Environmental Protection Agency are excited to be part of this work, and we hope to continue to contribute positively and constructively to it.

Mr. Chairman and Members, this concludes my statement. I would be pleased to answer any questions the Commission may have.

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< CONFIRMATION REPORT >

03-10-1995(FRI) 17:48

[RECEIVE]

NO.	DATE	TIME	DESTINATION	PG.	DURATION	MODE	RESULT
13899	3-10	17:40		19	0°08'03"	NORM.E	OK
				19	0°08'03"		

Right to air emission credits -
local credits -

Fed gov't should promptly hand over ~~credits~~ projects & the air credits: It should be to ~~projects~~ local gov't: & before 10 P.M. to local gov't to use as projects.

Good afternoon, Mr. Chairman and Members of the Commission. I am Timothy Fields, Jr., Deputy Assistant Administrator for the Office of Solid Waste and Emergency Response at the U.S. Environmental Protection Agency (EPA). I am pleased to appear before you today to discuss EPA's perspective on reuse at closing bases.

First, I will discuss the Fast Track Cleanup Program. This Administration is committed to the revitalization of communities affected by base closure. President Clinton's Five Point Plan to speed the economic recovery of communities where bases are slated for closure is built on the partnership EPA, the Department of Defense (DoD), and the states have worked hard to develop. EPA's main contribution to the President's program is in the area of "Fast Track Cleanup." The Fast Track Cleanup program focuses cleanup efforts to facilitate the reuse of closing bases. Its foundation is the BRAC Cleanup Team that works to identify clean parcels for early reuse, select parcels for leasing where cleanup is underway, and accelerate the cleanup.

In returning closing bases to productive use, we will appropriately address environmental protection and economic redevelopment. We will implement the applicable laws and regulations fully. Communities around the bases deserve full protection under the law. At the same time, we will work to successfully convert closing military bases to civilian uses.

EPA and DoD see the closure and realignment of military bases as both a challenge and an opportunity to work with the states, local communities, and citizen groups to achieve a balance between the need to assure the protection of human health and the environment and the need to minimize the impact on the community by facilitating the timely reuse of the installations. There are often unique challenges in cleanup and conversion that do not arise at bases remaining open. There may be a need to accommodate community reuse and shift our priorities for cleanup from the "worst first" to the "most attractive for reuse first." EPA is committed to help in this priority shift, as long as we ensure that any immediate threats to public health and the environment are addressed. We recognize how important it is to improve coordination between the cleanup efforts and the reuse efforts. Information concerning the nature and extent of contamination must be made available to the community reuse effort as early as possible to assure that the planning process takes into account the existing conditions at the installation.

Moreover, we see this as an opportunity for involved parties to work cooperatively. Together, we can diffuse the conflict sometimes attributed to tension between economic interests and environmental protection. EPA and DoD will maintain their mandate to protect human health and the environment, and will work together to help affected communities gain a healthy economy without having to sacrifice a healthy environment.

EPA: Do all members of the BCT's have decision making delegated down to the same levels? It's not useful if only EPA's decisionmkr is delegated sufficiently far down. Can you count?

The President's program calls for an "empowered" cleanup team that make decisions locally and quickly. The BRAC Cleanup Teams, established at 77 bases with environmental contamination and land available for transfer, are comprised of DoD personnel, a State regulator, and an EPA Remedial Project Manager (RPM). Of the 77 bases, are on the National Priorities List (NPL). The EPA RPM will provide technical expertise, regulatory guidance, and oversight. For major closing or realigning bases on the NPL, EPA Regions will assign an RPM to work full-time with DoD, the State, and local communities to expedite the cleanup process. For closing bases not on the NPL, or for minor realigning bases, the Region may assign an RPM to more than one base. The RPM is empowered to make decisions or has immediate access to high level decisionmakers when the need arises. The RPM is supported by a team of EPA experts in such areas as hydrogeology, health risk assessment and toxicology, ecological risk assessment, engineering, community relations, field work support, and clean parcel identification. These experts will work across installations, depending upon the needs at each site. EPA calls its own program to support Fast Track Cleanup the "Model Accelerated Cleanup Program." The MAC program is supported by resources from DOD for activities related to accelerated cleanup at closing bases. The resources from DoD will continue for at least five years for the 1988, 1991, and 1993 base closure rounds so that EPA may continue to assist with accelerated cleanup of DoD facilities in support of President Clinton's goal of economic

EPA/

/ Sherri: what happens when a community really wants something to happen & the risks are just too great to do it right away?

EPA/Sherri

Ordnance: ~~the don't want~~ Much criticism that public land is going into hands of other fed agencies. One example is the turning over of parcels w/ UXO on it to [DOI]. ~~Is it simply too high~~ Is there any way that more of this property could be reclaimed for community use? ~~subject to use~~

EPA: You make a point about providing technical assistance in order to speed cleanup. Can EPA / Has EPA taken efforts in its participation in BCT's to cut cleanup costs?

Sherri: Restoration Advisory Boards: How much voice do citizens have in how the military should spend its cleanup dollars, particularly insofar as this influences the speed & priority of achieving reuse goals? Do citizens have enough say in the matter? Can RABs be used to curtail costs?

Do leases generate any less profit / economic energy than do transfers?

DERTF comment: environ. justice. Similar to Sharpe Army Depot in minority areas.

Sherri: No one is supposed to be gaining ~~suffering more benefits, more opportunities from cleanup~~ disproportionately from reuse such that the community is left out. However, the citizens of Hunters Point make this charge. How do you respond to this?

Sherry: are BCP's worth the effort? worth the $$ that's been spent on them?

Sherry: How do you view the

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950324-20

FROM: TAIBL, PAUL E.	TO: DIXON
TITLE: DIRECTOR, ECON. SEC. PROG.	TITLE: CHAIRMAN
ORGANIZATION: BENS	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED:	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL			
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON	✓		
DIR./COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA			
COMMISSIONER COX			
COMMISSIONER DAVIS			
COMMISSIONER KLING			
COMMISSIONER MONTOYA			
COMMISSIONER ROBLES			
COMMISSIONER STEELE			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER			
AIR FORCE TEAM LEADER			
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			
DV	✓	Tyler Return to OASLTL	
SYLVIA THOMPSON			

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FOLLOW UP TO THEIR TESTIMONY AT MARCH 16 HEARING.

Due Date:	Routing Date: 950324	Date Originated: 950322	Mail Date:

Business Executives
for National Security, Inc.
1615 L Street, N.W.
Suite 330
Washington, D.C. 20036
(202) 296-2125
(202) 296-2490 FAX

March 22, 1995

Alan J. Dixon
Chairman
Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, Virginia 22209

Please refer to this number when responding 950324-20

Dear Senator Dixon:

Business Executives for National Security appreciated the opportunity to testify before the base reuse hearing on March 16. Bill Tremayne asked me to follow up on your request for details on our recommendations for further improvements in the disposal and reuse process. Attached are two documents. They reflect BENS' current evaluation of the issues tempered by 12 years of active involvement and support of the base closure process.

a) In prepared testimony submitted to your staff on March 10, we made eight fairly specific recommendations on reuse "process" problems. Also detailed in the statement are several environmental clean up and compliance recommendations, in particular one recommending a "best" first rather than "worst" first clean up scheme as a means of speeding the disposal process. I have attached a record copy of the written testimony which was the basis for Bill Tremayne's brief summary at the hearing. These recommendations form BENS' policy goals for improving disposal and reuse planning and implementation.

b) Specifically questioned during the Q&A was our recommendation concerning the "one-stop" shop concept for uncomplicating and speeding the base redevelopment planning process. BENS believes that central to the "one-stop" concept--already partially embraced by the Pentagon--is the need to adopt a "customer service" perspective in its employment. The second attachment amplifies that recommendation.

BENS applauds your intent to make closure and reuse recommendations part of your report to the President and Congress. We welcome the opportunity to work with the Commission and, in particular, with Sylvia Davis Thompson to ensure those recommendations facilitate the reuse process. We will also continue our work after the Commission disbands with EDA in the Department of Commerce and with the Defense Department to see that the recommendations move from proposal to implementation.

Sincerely,

Paul E. Taibl

enclosures

Paul E. Taibl
Director
Economic Security Programs

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Washington, D.C. 20036
(202) 296-2125
(202) 296-2490 FAX

Statement Of

WILLIAM H. TREMAYNE

MEMBER OF THE BOARD OF DIRECTORS
CHAIRMAN OF THE POLICY COMMITTEE
BUSINESS EXECUTIVES FOR NATIONAL SECURITY

before the

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

presented March 16, 1995

ATCH 1

INTRODUCTION

Mr. Chairman and members of the Base Closure and Realignment Commission, thank you for inviting Business Executives for National Security—BENS—to testify before you on the important issue of "post-closure" activities at military installations. I am William H. Tremayne, a member of the Board of Directors of BENS. BENS is a national, non-partisan organization of business leaders working to strengthen national security by promoting better management of defense dollars, advocating measures to make the economy stronger and more competitive, and finding practical ways to prevent the use of weapons of mass destruction.

In 1982 and 1983, I was the project manager for the Defense Task Force of the Grace Commission which recommended, for the first time, that an independent commission identify superfluous military bases that could close without diminishing the Pentagon's operational capabilities. Even in those Cold War days, former Secretaries of Defense told us that the domestic base structure was more than twice as large as militarily necessary.

Disappointingly, neither Congress nor the Pentagon took any action until five years later when Representative Dick Armey (R-TX) authored innovative legislation calling for the creation of a special commission for base closures—essentially implementing the Grace Commission's recommendation. BENS took this idea and promptly formed the Coalition on Military Base Closures to support Representative Armey's legislation. BENS' successful effort in educating the general public and Pentagon officials was recognized in Congress as a key factor in gaining Department of Defense support for the commission process.

Since that time BENS has retained a leadership role with regard to the base closure issue. For the past 4 years BENS has maintained an active Defense Transitions Project promoting a fair and businesslike system of closures, doing what it can in the process to alleviate local economic shock by facilitating redevelopment plans for base properties and the consequent economic rehabilitation of the dependent communities.

In 1992 BENS undertook a major study of how the base closure process had affected communities following the first two closure rounds in 1988 and 1991. Entitled *Base Closure and Reuse: 24 Case Studies*, the findings have been widely cited in the media and the results used by the administration and Congress to develop the current set of community assistance policies. Again in 1994, BENS sought to focus government attention on why closed military facilities don't stay closed. In *Uncovering the Shell Game*, a special report of the BENS Defense Transitions Project which pointed out that the process that ensues after the BRAC completes its work operates without public scrutiny and can often result in reuse and reopening decisions that run counter to the intent

of the Commission. That report has drawn attention and some criticism. I believe earlier questioning by this Commission has already alluded to the findings of these two BENS reports.

As the 1995—and perhaps last—round of base closures begins to take shape, BENS is focusing its efforts on helping communities replace jobs and rebuild the economies affected by the previous three rounds. Whether or not the base closure process is extended into the future—and BENS, by the way, supports such an extension—the legacy of past closings and realignments leaves a daunting task ahead for the Defense Department and the communities affected by closures and realignments.

As a measure of the challenge, note that the 1988 DoD Commission recommended 86 military bases (large and small) for closure and another 59 for realignment. Since the current process was established by the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) another 168 closures and 93 realignments have been added to the active list. By the Pentagon's own account, more than 70 major bases and several hundred smaller bases are in various stages of closure or realignment. In 1995, if only the Pentagon recommendations are considered, this round could add another 146 to the tally.

Although the Commission process has succeeded in mitigating political roadblocks to base closure, many regulatory, statutory and environmental restoration obstacles to the "post-closure" redevelopment and reuse process persist. To be sure many important strides have been made by the Defense Department. Among them, rapidly enacting congressional legislation to grant economic development conveyances when communities have viable plans to create jobs. Approving interim leases while legal deeds and environmental restoration plans are being readied. Factoring the community reuse plan into the federal screening process as a coterminous rather than a sequential action. And, reconciling through legislation the needs of the homeless and the local community's economic development needs.

In December, BENS was pleased to be able to submit to the Assistant Secretary of Defense for Economic Security comments on the so-called Final Rule on "Revitalizing Base Closure Communities and Community Assistance." Our comments focused on the rule's conformance with the President's Five-Part Plan and the Base Realignment and Closure Acts of 1988 and 1990. The final rule properly recognizes the importance of putting communities first by eliminating some of the obstacles standing in the way of rapid base reuse by affected communities. Though the rule is still in the approval stages at the Defense Department, we believe it represents real progress toward providing the kind of streamlined property disposal process BENS' has long advocated. Among other things, the final rule will clarify the use of Economic Development Conveyances as approved by Congress in 1993 and reconcile the determination of Fair Market Value which is critical to an EDC conveyance. We will have to wait and see if these refinements clear some of the backlog and speed the disposal and reuse of bases closed in the 1995 round.

In the meantime we believe there is additional work to be done in areas not fully addressed or not fully implemented by the Department of Defense. The theme which must pervade the federal government's, and in particular the Defense Department's approach to the "post-closure" segment of the realignment and closure process is speed and finality in disposal and reuse. Speeding up the decisionmaking process is essential for the Pentagon to begin accruing the savings of reduced infrastructure operating costs. Just as important is the benefit to the local community of finality in the government's decision making process thereby permitting early access to the properties and facilities for reuse. The goal of the government must be to provide the affected communities with the tools and funds to begin planning, act swiftly to conclude federal screening and clean up actions, then move out of the way to let communities enact their reuse plan. Let me point out a few substantive areas which BENS believes need to be addressed to achieve speed and finality in the disposal and reuse process.

Bringing a Customer Service Focus to the Office of Economic Adjustment

The Office of Economic Adjustment is helping base closure communities get a jumpstart by speeding up grants and community redevelopment activities — realizing a recommendation BENS made back in 1992. However, in our work with various Local Redevelopment Authorities (LRAs) a common frustration voiced is that the Pentagon's "one stop" concept still lacks a "customer service" perspective, forcing communities to risk missing some available assistance because of confusion or ignorance, and often requiring them to hire private consultants to help them navigate the process. The question has to be whether the planning grants from OEA are being utilized by communities to retain expert advice on reuse planning or simply going to consultants to unravel the confusing and difficult mechanisms of obtaining available government help.

Putting Base Transition Offices into the Reuse Loop

The establishment of Base Transition Offices and appointment of Base Transition Coordinators at the community level to—in the Pentagon's terms—"slash bureaucratic thickets" is a positive step as well. Now the task will be to ensure that the local appointees do in fact become facilitators of local reuse planning and not simply another level of bureaucracy interposed between the government and the community.

Making Economic Development Conveyances Work

The amendments introduced by Senator David Pryor (D-OK) to the Fiscal Year 1994 Defense Authorization Act substantially reformed base closure law, including allowing land to be transferred at below market value to LRAs for the purpose of economic development and job creation. However, the Defense Department's implementing regulations have been disappointing

to LRAs because they blunt the thrust of the Pryor Amendment's Economic Development Conveyance provision. An amendment to the regulation last October gave clear priority to the LRA's reuse plan for disposal of property, but it added a significant burden by requiring LRA's to include in their applications detailed feasibility and marketing analyses which would support the claim that the gift of some or all of the value of the land would in fact create jobs better than a sale at full market value. The true test of need for below-market sale should be actual experience of the LRA in finding tenants and buyers of the facility. Once the reuse plan has been accepted and analyzed for environmental impacts, and environmental contamination issues have been settled for specific parcels, the LRAs should be allowed to have rapid transfer of property whenever they have a ready, willing and able tenant or buyer, with the DoD price to the LRA dependent upon the LRA's reasonably negotiated price to the tenant or buyer, without the delay and cost involved in financial feasibility and market analyses.

Adjusting the Cooperative Amendments Act

At most closing bases around the country, the Defense Department and LRAs are working on the process of transitioning responsibility for municipal services from the military to the local government. Prior to the base being leased or sold to the LRA, to the extent it is still federal property, the Services are entering into caretaker agreements under the Cooperative Agreements Act, paying cities and counties for various services in lieu of paying federal employees or contractors to perform them. In the Fiscal Year 1994 defense Authorization Act, the Pryor Amendments allows DoD to pay for police and fire services starting from a point 180 days before the operations closure of the base. In the Fiscal Year 1995 Authorization Act, a pilot program was set up to allow active and closed bases in Monterey County, CA (Fort Ord, the Presidio of Monterey Defense Language Institute and the Navy Post-Graduate School) to pay for these services. Because bases vary in the rate at which they close, the 180 day limitation is too arbitrary. Congress should simply allow DoD to agree to pay local government for these services at any point after selection for closure.

Amending Retrocession Law

Large areas of many military bases are under exclusive federal criminal and civil jurisdiction. This encumbrance means that the state has no authority within those areas to enforce civil or criminal law, including contract law, zoning and building codes—the ability to tax activities is limited to the possessory interest of tenants. Retrocession to state jurisdiction usually occurs only when title is sold by the federal government. However, due to contamination problems, most base land remains in a lease arrangement for many years. Thus, an alternate route to retrocession must be undertaken by LRAs in order to ensure they can enforce the laws, regulate and tax their business tenants. That process generally involves action by both the Service Secretary to offer to retrocede jurisdiction and by the state government to accept it, typically taking 6 to 12 months. Congress should enact into law a provision that simplifies the process of retrocession.

Environmental Contamination and Remedial Actions Affecting Reuse

Problems related to contamination of military base property with hazardous substances continue to jeopardize the base redevelopment process as well. There are several specific problems which could be solved by statutory or regulatory action:

The most crucial issue is control over the priorities of cleanup. Since the beginning of the Superfund program in 1980, priority for cleanup at military bases has been defined as "worst first," that is, the sites that presented the greatest risk to health and the environment were investigated and cleaned first, while less contaminated sites were put at the bottom of the list.

Now, as LRA's at closure bases seek to lease and purchase military facilities on behalf of commercial tenants, the priority should become "best first"—the cleanest or most commercially viable properties should be given priority for site investigation and cleanup, after immediate threats to health have been addressed. DoD, EPA and the states should be directed to make "best first" their priority in all remedial work at closing bases. More parcels of land will be sold sooner, increasing revenue flow and facilitating wider redevelopment options.

There are other measures that can help ensure that "best first" is the priority in base clean up. Last fall's amendments to the Defense Environmental Restoration Act (10 USC Section 2705) gave significant authority and funding to Restoration Advisory Boards (RABs) made up of citizens living near military installations. At a minimum, the statute should be revised to give consideration to the LRAs which represent the reuse and redevelopment plan and provide them with membership in the RAB.

A second action which will support "best first" clean up is to codify in law that clean up standards on contaminated property will hinge on the LRA's reuse plan for the affected property. It is irrational to require residential levels of clean up for property which will transfer to industrial or other non-residential use.

Another specific threat to base reuse related to cleanup was identified last summer, when a homeowners' association in Denver initiated a lawsuit to halt the execution of the reuse plan. The lawsuit was based partly on a citizen's suit action under the Resource Conservation and Recovery Act, trying to take control of the base cleanup away from the Air Force, which was already well along in conducting remedial actions under state supervision and the authority of CERCLA. The law should be reinforced, to clarify that RCA was not meant to be used as an instrument to spike the tires of the community's base reuse convoy.

There is one other major shortcoming in the military's clean up responsibilities. At

many bases there are buildings which have deteriorated to the point of obsolescence. The only appropriate action is demolition. Yet, demolition of these structures cannot be conducted until after costly and time-consuming removal of all asbestos-containing material. Although the Defense Department does not currently support demolition of structures on closing bases, removal of asbestos-containing material in buildings worth only demolition is clearly within the scope of the Defense Environmental Restoration Program. In fact, one of the main sponsors of the military's remedial funding program, Senator Ted Stevens (R-AK), intended that the fund be used to carry out demolition and asbestos removal at many closed radar sites across Alaska. That program continues to this day.

Environmental Compliance and Protection Issues

In addition to cleanup of contaminated soil and groundwater, there are other significant environmental issues at closing bases which need statutory or regulatory reform. Most military bases are large and diverse industrial plants, with problems related to air pollution, water pollution, and natural resources protection. Just because a military base ceases to be operational does not mean that its compliance problems are solved. All too often, a major pollution control requirement has been ignored until the base closes, leaving the LRA with the necessity of paying to fix the problem, or even pay associated penalties, before portions of the facility can be legally uses by commercial tenants. The military services should be required to assume the cost of retrofitting and bringing into compliance still-active utilities and infrastructure facilities.

There must be an ironclad policy that any facility that is leased or transferred to the LRA will be accompanied by all its related environmental permits, so that the LRA's are not forced to shut them down or undergo more stringent standards that are often applicable o new applicants for permits. This includes the requirement that the military at each base take the necessary steps to ensure that permits remain active, including payment of regulatory agency fees.

Air pollution districts across the nation are currently engaged in asking air permit holders to file applications for new permits under Title V of the 1990 Clean Air Act Amendments. The Title V permits are intended to provide comprehensive information, in one place, about all regulations affecting emissions of the permit holding facility. The application for a Title V permit for a large military base can cost hundreds of thousands of dollars and hundreds of employee-hours to prepare. Military bases will be asked to submit their applications over the course of the next three years (1995-1997). Bases which are closing before their applications are requested are simply ignoring the requirement, leaving the LRA's to pick up the tremendous up-front burden of obtaining the Title V permits, or justifying why they are not needed. The military Services should be required to gather and preserve all the information required by the Title V regulations and assist LRAs either financially or with DoD services, in complying with this law.

I would like to offer a few comments on post-closure issues that have emerged in BENS' discussions with community leaders and base reuse officials but for which, unfortunately, I have no completely satisfactory solutions at this time. Perhaps the Commission can in its final recommendations put the experts to work on resolving some of these problems.

Inconsistency of Closure Implementation Across the Services

First is the issue of consistency. Practices, procedures and implementation of policy appear to vary tremendously from Service to Service. Why, for example, would a golf course at one closing facility be on the block for $6 million while a similar facility at another base be offered to the community free of charge? The reasoning may be completely justified, but the perception of inconsistency, if allowed to linger, distracts from the process. As the number of closings in progress increases, so does the nationwide cross-talk among redevelopment authorities and local political organizations which only amplifies the inconsistencies and adds to the confusion and frustration of all parties.

Unrealistic Expectations of Land Resale Values

Infrastructure upgrade improvements—roads, sewer, power, water and telephone lines—on closing bases are turning once-inflated real estate expectations into grim assessments that properties, in some cases, may be worth less than zero. The Defense Department is not bound to fund demolition projects or code improvements on closing bases. Communities are facing the prospects that resale and leases of base land and taxes on the property will not be enough to pay for redevelopment. The Untied States Conference of Mayors in its recent report on a *National Action Plan on Military Base Closings* recommended numerous interim measures to mitigate the problem, among them qualifying military bases for automatic consideration as Enterprise Zones, eliminating the requirement that conversions comply with duplicative state and federal environmental regulations, and exemption/extension of conversions from uniform building codes, uniform fire codes and Americans with Disabilities Act compliance— at least for the short term. As to demolition and removal, they recommended that the BRAC consider these costs as part of the criteria to determine whether a base ought to be closed in the first place. None of the solutions are completely satisfactory and BENS has not had time to study them fully, yet the accumulation of evidence indicates there is a problem that is more than a perception which needs to be resolved.

Empowering Communities to Plan for Closure and Reuse

One of the strongest lessons from earlier base closing rounds was that empowering a cross-jurisdictional, if necessary regional, authority to plan and implement the base reuse plan, created the best climate for job creation and economic recovery. This may seem an obvious lesson,

but the instances nationwide in which communities have not been able to effectively organize following a closure decision indicates the lesson has not been driven home. Although there is little the federal government can do to impose harmony and efficiency on communities, there are inducements that can shape and promote cooperation. For example, by making the date of the federal government's plan certain, structuring grants with incentives for acting swiftly, assuring communities there is no penalty for advance planning even while a base is undergoing closure review, and possibly putting sunset provisions on federal assistance to prevent grants from becoming dependencies, the reluctance of many communities to cooperatively engage in reuse planning could be tempered.

Summary and Conclusion

The reason base disposal and reuse is succeeding is that the government and affected communities have moved well up the learning curve since the first round of closures. The Congress in legislating and funding relief from bureaucratic federal screening and property disposal laws dating back to the 1940s has cleared the statutory impediments. Efforts by the Office of Economic Adjustment in the Pentagon and the Economic Development Administration in the Department of Commerce, have enable communities to progress from the anxiety of base closing to within sight of long term recovery and economic growth on affected bases. Threatened cutbacks in funding and support for environmental restoration accounts and the organizations—like EDA—which implement the law could severely undermine disposal and reuse plans. I would encourage the Commission to add its weight to ensuring that the process is allowed to continue.

In concluding, let me return to BENS' principal recommendation in dealing with the cumulative effect of the closure rounds since 1988. Government must act swiftly and with finality in determining its residual requirements and environmental clean up responsibilities once it has decided to vacate a facility. Then it must step aside and let communities begin the redevelopment and reuse process. Government can be an aid in reuse and redevelopment success—by funding and encouraging advance planning, by permitting communities early access to facilities, to inventory plant and equipment to be left in place, to—when practical—permit dual-use of excess capacity as the Defense Department operations phase down, and, most importantly, to ensure that the full authority of legislation and regulation—often so clear in the minds of its drafters—is understood and translated into action by government officials down the chain of command.

Mr. Chairman, thank you for the opportunity to testify before the Commission. BENS will remain available to the Commission and to the government agencies charged with carrying out the provisions of the law as the one truly independent organization that has studied the effects of base closure on local communities. Our interest in the base closure and reuse process has been long-standing and will continue through this 1995 round and as long as the process of returning these valuable base assets to community reuse continues. BENS

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Bringing a Customer Service Focus to the Office of Economic Adjustment: Amplification of recommendation made in Commission testimony, March 16, 1995

Background. In BENS' April 1993 report, *Base Closure and Reuse: 24 Case Studies*, we recommended that Congress and the Defense Department create a community reuse "one-stop" shop. The impetus for the recommendation came from our observation that the Pentagon's Office of Economic Adjustment (OEA) worked effectively with communities to create redevelopment plans, but did not help them navigate the maze of red tape to comply with regulations of the many other offices and agencies involved. We recommended that OEA project managers be permitted and encouraged to approach other offices--in DoD and at other federal agencies--on behalf of the bases they represent to gather information, assemble documentation and provide technical assistance. In effect OEA project managers would become case workers for the distressed communities.

Status. In the 2 years since BENS recommended the "one-stop" concept, the Pentagon and the Department of Commerce have developed and implemented a number of policies opening community access to government redevelopment planning help. In DoD, the establishment of base transition offices and appointment of a base transition coordinator at each closure location have--coupled with the OEA project manager--put a point-of-contact at each end of the pipeline. In the Department of Commerce, the establishment of the Office of Economic Conversion Information (OECI) in the Economic Development Administration has provided an electronic clearing house of information and resources available to both defense industry conversion and base closure communities. If not exactly in name, the one-stop concept has come into being in structure and practice.

Recommendations. In our March 16 testimony to the Commission BENS noted that a common frustration voiced by Local Redevelopment Authorities (LRAs) is the lack of a "customer service" perspective in the government. While this characterization is probably an oversimplification of what is clearly a very complex service delivery problem for the government, the gist of the LRA's consternation is that policies are confusing, rules have not become final, and that--as communities begin to compare notes--they find that application of the government's policies are inconsistent both within and across services. BENS thinks the problems--which are largely ones of management emphasis and communications--can be greatly reduced by:

a. Ensuring that the benefits to the government of speedy and final disposal of base closure property--which are well-understood at the top echelons of the Defense Department--are transmitted and understood by the department's agents in the field and at the point of contact with the LRAs.

ATCH 2

b. Encouraging the Department of Defense to move forward with its planned community handbook and series of conferences throughout the country on available government resources and other base redevelopment support.

c. Implementing the final rule on revitalizing base closure communities and community assistance which has been in coordination within the Defense Department since early 1994. This rule would encourage communities to do serious reuse planning rather than delay--as is often the case today--awaiting further change in government policy.

d. Requiring the Defense Department to closely monitor implementation of its forthcoming policy manual for the military departments and defense agencies. While a manual--by definition a guide, not a directive--may be appropriate for giving latitude to government base closure representatives, without oversight and guidance by senior leaders in the Pentagon it could also exacerbate the perceived inconsistencies in policy application that have been voiced by local communities.

e. Finally, and possibly with greatest potential of cutting red tape and delay, allowing the Defense Department and the Department of Commerce to delegate authority for deciding community base closure issues to the lowest possible levels commensurate with legal and best management practices.

Summary. BENS believes that the government has made tremendous progress in the disposal and reuse of base closure properties since the first round in 1988. As the process plays out, the number a bases closing and realigning has grown from a dozen to over 300. The challenge to the government has grown more complex and the learning curve has been steep. Given the challenge, BENS maintains that good management of defense resources demands that the government act swiftly and with finality once it has decided to vacate a facility. Then it must step aside and let communities begin the redevelopment and reuse process. The most important guideline in carrying out its responsibilities is to ensure that the full authority of legislation and regulation--often so clear in the minds of its drafters--is understood and translated into action by government officials down the chain of command.

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

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INSTALLATION (s) DISCUSSED:	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
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DIR./CONGRESSIONAL LIAISON				COMMISSIONER STEELE			
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				DIRECTOR OF R & A	✓		
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DEFENSE DEPARTMENT SPECIAL BRIEFING
BRIEFERS: JOSHUA GOTBAUM, ASSISTANT SECRETARY OF DEFENSE FOR ECONOMIC SECURITY, MAYOR KATY ROBERTSON PODAGROSI, RANTOUL, ILLINOIS, MAYOR EDWARD "NED" RANDOLPH, ALEXANDRIA, LA AND BEN WILLIAMS, DEPUTY DIRECTOR FOR PLANNING AND RESEARCH FOR THE STATE OF CALIFORNIA
THE PENTAGON
SUBJECT: COMMUNITY REUSE OF CLOSED MILITARY BASES
WEDNESDAY, MARCH 15, 1995

STAFF: Good afternoon. The theme of today's briefing is, "Yes, there is life after BRAC." We're pleased to have with us Josh Gotbaum, the assistant secretary for economic security, and he will lead you through a sort of "how's it going?" briefing on the community reuse plan, which he runs for bases affected by the Base Realignment and Closure Process.

He has brought with him three people, and we're very lucky to have them here, three people who can tell you personal experiences about their efforts to bring new life to bases that have been closed by the military. First we have Katy Roberts Podagrosi of Rantoul, Illinois, home of the former Chanute Air Force Base. And we have Mayor Edward -- known as "Ned" -- Randolph, of Alexandria, Louisiana, home of the former England Air Force Base. And we also have Ben Williams, who is the deputy director for planning and research for the state of California, the office of Governor Pete Wilson. So welcome to you all.

And Josh will kick things off.

MR. GOTBAUM: Thank you very much. Given all the activities that we've been engaged in before the BRAC committee, i.e., making recommendations about closure, we thought it was equally important to make clear and explain that there is life after base closure, that the bases that we leave and close down are turned into other kinds of facilities, that new jobs are created, and that in many cases what communities find is, after the first response, is there are new jobs, new businesses, and other new uses that are substantial in some cases, as substantial or more substantial than they were when the base was open. And so what I'd like to do this afternoon very briefly is really talk about what we do in the federal government to assist in this process and then, frankly, let some of the heads of the communities talk about what their experience is.

If you all thought that the process of deciding whether to close a base is complicated, then let me tell you that the laws, regulations, et cetera, under which we have to dispose of base property are even more complicated. And as a result, before we can dispose of base property we have to go through moving people out, making changes, doing environmental reviews, negotiating transfers in some cases, various kinds of conveyances. It is a long, complicated and involved process. And in order to help communities respond and take advantage, we do a number of activities, either ourselves within the Department of Defense or with other federal agencies.

First of all, we offer transition assistance. There is within the Department of Defense a small, highly competent group of people who provide both technical advice and modest planning grants, called the Office of Economic Adjustment. This is a group which has for many years been able to help communities figure out how best to get organized, what kinds of re-use are capable of being planned for, and providing limited planning grants. We're talking about several hundred thousand dollars, $300,000, $400,000, $500,000, depending on the size of the community and the size of the grant, to help communities get started.

And in addition, we have, as a result of

President Clinton's directive, in every major base closure community a base transition coordinator. This is a person whose job it is full time to be an ombudsman or ombudswoman, to make sure that local communities that are interested in property get the story straight, to make sure that communications are open between communities, interested parties, the base commanders, the Department of Defense and other federal agencies. There are now over 70 base transition coordinators; as a result of the latest round of BRAC there will be, we believe, between 30 and 40 more.

So, one thing we do is provide assistance to communities and planning grants to help them get started.

The other thing we do is try to make the process of disposal more streamlined.

As I mentioned, we operate under an extraordinary array of laws, from the Federal Property Act of 1949 to the National Environmental Protection Act of 1972 to three separate base closure pieces of legislation, and two pieces of legislation, both helpful within the last couple of years, to make this process more streamlined, and we are beginning to do so.

The old process was one in effect in which everybody had to wait in line. After a closure decision was made, first you had to offer the property to parts of the Department of Defense and wait and see if they took, then you offered it to other parts of the federal government and waited to see if they took, then you could offer it to representatives of the homeless to see if they took, and then state and locals or private developers. As a result, we had a fairly long, complicated process. The president of the United States, in July of '93, said that can't stand, we need some improvement. And as a result, we are now doing property disposal on a more streamlined basis.

The other thing that we are doing is we are trying to do faster environmental cleanup by doing it on a coordinated basis, by creating cleanup teams that include team members from the Department of Defense, from EPA, where appropriate, from state and local environmental authorities, so that working together they can walk the base and figure out what kind of remediation is necessary. No one would ever say that the process of cleanup is quick or easy, but what we're trying to do is do it faster and better, and we believe that we're doing so and we're making some progress.

This is for the first three rounds of BRAC, the time it took to pull down the flag on the bases in that round. And in BRAC '88, the first round, it took us almost four years to close half of the bases. In the latest rounds of BRAC, we've cut that time basically in half, so we're doing this process faster.

Similarly, communities and developers are also learning more and learning how to do this process faster. And as a result, the first round of BRAC, it took the average community over two years to develop a base reuse plan. And this is a general document that provides some guidance so that from within it we can figure out what resuses make sense, what kind of conveyances make sense – should convey as park land, should you convey as an educational institution, should you convey as an airport, or as we're now legally permitted to do, should you convey for job creation? So five years ago, the first round of BRAC, 2-1/2 years to do a reuse plan; BRAC '91, a year and a quarter, 1.3; BRAC 93, half the communities had reuse plans in a year, within a year.

So what we find is that we're making real progress. And what we hope to do is really to have people talk about what the process has been and how they've dealt with it. The result of that process – and I'm going to leave the mayor to explain that – is that what were federal bases become a range of uses – aviation, in some cases education, in some cases recreation, and so forth.

And that really is all I want to say at the briefing stage, is that this is a complicated process, this is one that the president of the United States has said personally the federal government will do better, and it's one we are, we believe.

Furthermore, as I will leave it to the mayors to tell you, what communities have found is that after base closing there are new jobs, in some cases there are better jobs, there's a diversity of uses. So what they find is in some cases, in many cases, a healthier economy and greater job creation. On average, what we find thus far is a year after the formal closing, a year after the flag comes down, about 60

percent of the civilian jobs lost have been replaced. So there is substantial new job creation and we expect there'll be more.

If I could, since Mayor Randolph, your sign happens to be up, why don't I turn over to Ned Randolph from Alexandria, Louisiana to talk a little bit about your experience and the process as you found it, sir.

MAYOR RANDOLPH: Let me do something here. Mr. Secretary, I want to tell you how much we appreciate your help and the help of your staff in making this reuse a lot more beneficial and helpful than it might otherwise have been. As you know, probably on March the 28th we're going to have our long-term signing of the lease -- long-term lease signing ceremony. And I want to give you this personally, an invitation to that signing.

MR. GOTBAUM: Oh, thank you, sir.

MAYOR RANDOLPH: I know our offices have been in contact, but I just wanted to do that personally.

MR. GOTBAUM: Okay. Thank you very much, sir.

I'm sure he says that to all the assistant secretaries. (Laughter.)

MAYOR RANDOLPH: There is life after base closure, and I think there's some very successful examples of that across the country.

If I can leave any one thing with people who are facing what we faced in the middle of 1991, when we were on the base closure list and then when Congress finally made it a done deal, that would be that you start as early as possible the communities getting together, as early as possible in the process. Don't wait for the closure list. Now some have already waited for the closure list, but if it's possible, don't wait. Start a year ahead of time or whenever in deciding and planning and researching on what you're going to do when and if that base or that facility is closed. And those that have been successful in reusing, in my opinion, are those that started that planning process early on.

That's not to say that communities shouldn't fight to save their facility, because in my judgment, you have to do that. I don't know of any community that hasn't come up to Washington and lobbied their congressional people and talked to the Pentagon and tried to tell why their facility shouldn't be closed -- in the national interest it shouldn't be closed, economically at home it shouldn't be closed, and all the reasons that we all hear.

And that fight should be made, but at the same time, there should be dual tracking. There should be another fight, if you will, going on, and that is the fight to reuse it in a successful way.

Alexandria is right in the center of Louisiana. It is the largest city in a large geographical area of the state -- about 50,000 people in the city, 100,000 in the urban area. England Air Force Base was -- and the England Air Park Facility, which is what we call it now -- is just adjacent to the city limits. A lot of communities, I think, will be in that same situation, where the facility is not wholly within the corporate limits of the large -- or any of the towns. But in the middle of the several communities that make up indeed a large community, England is just northwest of the city, but it's in kind of the heart of our parish, which is like your -- like most people's counties. We call them parishes.

The governing authority of the Parish of Rapides, the governing authority of the City of Alexandria, the governing authority of the smaller towns in the parish, and the chamber of commerce, representing the business community, all got together in this planning process to decide how we were going to go about reusing it at an early stage in the process, as I said. We asked the legislature to create a district governed by a board of commissioners that would speak for the community with one voice, and that is really important. Because if you don't do that, you're going to be fighting with the -- parish governing authority will fight with the city governing authority will fight with civic or business leaders in the community, and the smaller towns that think they have a -- know that they have an interest in what happens, and that could go on forever.

I don't believe we'd be near where we are now if we hadn't come to grips with that kind of process in establishing the redevelopment agency as a combination of the whole community, so that it can speak with one voice not only with the government, the Pentagon, OEA, the state legislature, but the tenants,

prospective tenants that come and look at your facility to see if they want to bring something there. We have been very successful. We had about – almost 800 civilian jobs at the end of '91. Our base closed in December of '92, when the last Air Force people left. Now we – we had a little a little under 800 civilian jobs at the end of '91. We have over 800 now. And we're still open for business. We're still inviting prospects to come and let us show them what we've got.

We have reused the England Air Force Base school. It's now an elementary magnet school, really a top-notch school, academically top; you have to have certain grades in where you're coming from in the elementary school to get in or take a test if you hadn't gone to school yet. It's K through fifth grade. Tremendous program. It's touted by a lot of education people already.

J.B. Hunt Trucking firm has produced over 200, almost 300 jobs, trained over 2,000 truck drivers since they've been there. They were the first tenant, they were the kind of the anchor, and it got a little easier after we got that first one. But they were there with a driver training school actually before the last Air Force people left in December of '92. And that's because of the hard work and the help that OEA has given us and the hard work at home by the redevelopment agency.

We have General Aviation there already. We have a 24-hour tower open. We will be moving in the next year to year and a half the commercial aircraft operation from where it is now, which is quite east of Alexandria and off the beaten track, really, to this facility where it will be in the middle of a critical mass of people in the area and also the transportation network is close by, with the interstate and other improved roads.

The hospital is being reused by a state hospital but a new facility for them, it's a new outpatient facility creating several – 174 jobs, it is up there. The golf course is being used. There are plans now to use other recreational facilities out at the air facility. We have aircraft maintenance and other maintenance jobs.

So it's over 800 in total, and we have plans for many more. We thought by this time we'd have six leases, that was the plan; we have 13 leases already. So we really got started early and we're off and running. The England authority, as we call it, which is a redevelopment agency, has jurisdiction legislatively in economic development over the whole parish.

And, course, jurisdiction by governing the facility over the facility where all these examples that we have talked about are there. It's a little city. It's a ready made tool for economic development.

An example I want to leave you with as to why it's good for the redevelopment agency to have economic development jurisdiction over the entire parish or country, if you will, is something that happened to us when Boise-Cascade (sp) came to the England authority looking at the England facility to see of they could put together something there to build a new laminated plant and employ 200-400 people eventually. Couldn't quite make it work at the England facility, but they wound up about 14 miles to the north, still in Rapides Parish and will build that facility within the next year, year-and-a-half, there. Helps our whole area in economic development just as much as if they had been at the England authority. So, that's kind of an example of how it all works together.

These facilities will become magnets for economic development. They will draw interest from all over to the facility. And obviously, in the case of Boise-Cascade – and there are a couple of others that haven't been announced yet that have looked at that facility but see something else that they can put together in the area, and they stay there and create those jobs that we sorely need. The name of the mission – the mission of the redevelopment agency is obviously to create jobs that have been lost by the pulling out of the Air Force at England Air Force Base. And that's the mission, and that's what we're about.

It's been a interesting experience. It's been a rewarding experience. And I think the future is even brighter. We are working together in our community on this and other things because of this, and that started with that fight openly to save the base, to save the facility. And it's carried through with the reuse of the facility. And I've got to be frank with you, it's carried through in a lot of other adversities that

we have in our community, problems that we've had that if we had worked together -- and I think you can point back to that day that when we all started getting together to try to see what we could do about stopping the loss of the jobs and then creating the jobs that we had lost.

Q: Could you -- excuse me -- could you just run through just a couple of quick figures if you would? I might have missed it. How many civilian jobs did you lose when the base was first closed?

MAYOR RANDOLPH: It -- the statistic from the Pentagon at the end of December of '91 was approximately 790 jobs.

Q: And you picked up (1149?) now so you're on the plus side now?

MAYOR RANDOLPH: How many military personnel did you --

MAYOR RANDOLPH: We had about -- right at 3,000 military jobs on the base.

Q: I think what I'm getting at is, what does this mean in terms of your tax base, in terms of income for the community for the region? Are you still on the losing side in terms of --

MAYOR RANDOLPH: Well, it was a $70 million payroll when the Air Force was there, at the end. But we have found that -- since then that something we didn't know before was that a lot of that doesn't come into our community because it was being spent at the base exchange and being spent in other places, back home, to buy cars and that kind of thing. So we don't really think we lost a net $70 million direct payment. We have created over -- almost $13 million payroll with this replacement that's already gone on, and probably double that with indirect jobs that have been created.

Our sales tax, instead of going down by 10 percent which was anticipated and predicted -- has actually increased steadily since the base was closed. And government -- our local government especially runs most of its operation off of sales tax. And that was something that we were scared to death of. I mean, as mayor I could see losing 10 percent and having to lay off several hundred people and being run out of town.

Q: You mean the income from the sales tax?

MAYOR RANDOLPH: Yeah.

Q: What's the average salary comparison, as opposed to civilians who worked for the Air Force average salary, versus the average salary of people that work at the facility now?

MAYOR RANDOLPH: We're using a conservative figure of $15,000 times the 849 to get the figure that I told you about -- the total figure. We think that's conservative. It's really higher than that. I think overall it's higher than the civilian salaries were when the Air Force was there.

Q: What about the impact on the housing market?

MAYOR RANDOLPH: Well, we haven't done anything significant yet with the housing. And one of the reasons why we've been waiting is because we didn't want to dump that many houses -- 600 housing units -- on our local market. The housing was depressed at the time the base closed, we were afraid it was going to be depressed even more, people backed off for a while to see what was going to happen. Now there's a big demand for housing. So the agency will start releasing some of that housing -- especially the goal is to try to help tenants come by showing them that they can provide housing for some of their employees.

That's the first step.

Q: Who has control over the housing right now, or who has authority over it?

MR. GOTBAUM: May I make a suggestion? We have a couple of other folks talking, and I suspect that the questions you're going to ask are also going to be applicable to them, too. So if it's all right with you all, Mr. Mayor, may I suggest let's let Mayor Podagrosi tell her story and then Ben Williams tell his, and then open up for general questions. Okay? At least I suspect the questions will be applicable to other communities as well.

MAYOR PODAGROSI: Greetings from Rantoul, Illinois. Mr. Gotbaum, Mr. Dempsey, fellow reuse communities and members of the press: Rantoul is a town in central Illinois of about 20,000 people. It's located about 20 miles from Champaign-Urbana, home of the University of Illinois. Until September of '93, Chanute Air Force Base was located in our town and was second only to the university in being the

largest employer in Champaign County.

Shortly after we received word in 1988 that the base would be closing, we commissioned a university study on the effect that the closure would have on Rantoul, and we found that if we did not scramble very hard, that we would lose 65 percent of our economy. Evidently, we had our work cut out for us. We were losing 1,000 civil service jobs, 1,600 non-appropriated fund and contract-related jobs, and some 4,000 to 5,000 military. We have worked and we are successfully overcoming this horrendous challenge.

Since December 29, 1988, Rantoul has added some 2,500 additional jobs in Rantoul, 1,300 off base and around 1,200 on the former Air Force base property. In fact, today we're at the year 2001 in our long-range financial and jobs development projections. We have 45 new industrial and commercial tenants occupying 1.3 million square feet, generating $1.2 million revenues in airport – that's the lease money that comes in to help us pay for the airport.

We stood to lose over half of our municipal income, but we've had no decreases. Our property valuations and all sources of municipal tax receipts have increased slightly. They were static over all these years since 1988. At least they didn't go down. And now they're beginning to go up. A 40 percent increase in the use of municipally supplied electricity indicates a great deal of industrial activity. Over 300 new families have moved in to the former Chanute Air Force Base property, and about 40 more a month are moving in. We had a total of about 1,400 family housing units out there to fill. Now, in Washington, 40 a month may not seem very significant, but remember we're talking about Rantoul, Illinois, population less than 20,000.

Now, this won't seem significant to you until you think about it, but participation in team sports in Rantoul increased 25 percent in 1994, one year after closure, a total increase of 55 percent since 1988. To us, this indicates a community that remained alive, vital, and it offers a great place to play as well as to work.

These things didn't happen by accident. Most of you know my name because we've corresponded with everybody in Washington except Socks, and I've times we've even considered writing him. It's been a tenuous journey getting from there to here, but with the help of a lot of good people, it has happened. It will be easier for those coming after us because when we needed to accomplish something, often the laws had to be rewritten, regulations clarified, or staff added to enable the action that we needed. The Pryor amendment has been adopted, the transition coordinated is in place, and I take full credit for that entire program – (laughter) – since I called for a federal ombudsman way, way back. Everybody that came out our way, or every time I came here, I said, "Give us somebody with enough rank and enough voice that we can believe what they say and we can believe that they're going to take our message back." Well, that message came through. The Economic Adjustment Office is more fully funded, and EDA funds have been released to respond to the needs of communities facing base closure.

We enlisted the help of the Illinois congressional delegation, and they've been superb. Senator Dixon, now leading the Closure Commission, was an early champion for Rantoul and remains one of our greatest allies.

We yet have a long way to go. There are deeds to be transferred, utilities and roads to assume, personal property to transfer, and countless details to be worked out. But we're working with good people who are working on our priorities of jobs and population first, and then the other concerns can follow after that. I remember meeting Allen Olson (sp), director of the Air Force Base Conversion Agency, for the first time in front of Senator Pryor's Committee on Base Reuse. He took my concerns that day seriously, and I can truly appreciate the work that he has to do, but I know that if the law will allow him to do it today, he will do what he can do to make it work in Rantoul.

I am excited about the future of Rantoul, and the continuing challenge of filling up the Chanute properties. Among the things that I think have contributed to our success would be these: As the mayor before me mentioned, we have spoken with one voice from day one. Our community didn't have infighting about who or what group would be in charge. We

knew that our survival depended on working together. We were fortunate that Chanute property was within -- that all of the Chanute property was in the city limits of Rantoul. My office is two blocks from the main gate. If we were to avoid boarded-up windows in our front yard, we had to get the buildings used.

Chanute is or was essentially a college town. There were no overriding serious environmental concerns like some of the other bases, which we really feel for. But for the problems that we had, such as buried tanks and landfills, the federal government -- and I think this was surprising to us -- has moved ahead on this program. We've seen no indication that the federal government doesn't intend to do a good job of cleanup.

We patterned our reuse structure after Bangor, Maine, and Roswell, New Mexico.

They were successfully redeveloped towns that we identified with easily. They used existing city administrations and mostly local people to handle redevelopment. We hired one out-of-town individual, and he has become one of us and plans to remain with us as airport manager.

Last, we were conservative in the amount of property that we acquired from the federal government. I did bring some handouts for any of you that want them that shows what we took as public property and what we left to be bid out. We took the airport and airport support properties and some recreation properties. The remainder of the dorms, the housing, the administrative buildings, the hospital, the golf course and officer's club were sold at public bid to private developers. They were advertised nationwide, but every successful bidder came from those that we had recruited over the three or four years before the eventual sale. They are now our partners in marketing, and we haven't spread ourselves too thin in trying to take all of the base. The Air Force worked with our zoning map in identifying parcels for sale, and we are fortunate that all successful bidders have followed our redevelopment plan.

If I could make one suggestion for base closure situations, I'd like to see the local redevelopment authority, whether we're talking about towns or separate authorities, have the final sign-off on bid sales. Fifty dollars shouldn't make the difference between a responsible developer with adequate financing and an out-of-town speculator who might acquire property in the middle of town and sit on it for years waiting to arrange financing or for market changes. Community sign-offs with adequate safeguards for the government could assist communities in assuring quality redevelopment.

Again, thank you all for having me here, and I'll be available for questions if you have any.

MR. GOTBAUM: Ben?

MR. WILLIAMS: Thank you. It's a pleasure to be here today. My name is Ben Williams. I'm with the California governor's office, and I've had more or less oversight of base closure issues in California and have worked with communities in California facing base closure. As I think most of you know, California has faced more base closures than any other state in the nation. Currently most of those have lake-front property, so if you'd like to make reservations, I'd be glad to take any orders. (Laughter.) You need to act quickly because I understand it's starting to dry out a little bit now. (Laughter.)

But at any rate, most of our communities as they've faced base closures, of course, as any other communities, as the two we've just heard of, immediately have a response of despair and uncertainty, which is certainly understandable. We believe that there is a great deal of hope. In fact, we see base closures and base reuse as being one of the areas where California, which tends to be kind of constrained in terms of availability of developable land for urban -- for industrial uses and other uses, urban park uses, we believe base closure may offer a great deal of hope for the future in that area.

California has seen a number of, I think, notable successes in base re-use. Fort Ord, many of you may know, is going to become home of the newest campus of California State University. It will be a different type of campus for California State University in that it will be a resident campus. It will specialize in a number of environmental fields that will tie in with other interests in the Monterey peninsula. Adjacent to that there will be a University of California business and research center. California and the Department of

Defense and the federal government generally have been very supportive of these concepts and we believe that they will move along successfully.

Probably the greatest and most noteworthy success that we've had was one that was just officially unveiled, or officially came about about two or three weeks ago with the transfer to the city of Sacramento the Sacramento Army Depot. Most of that facility is being in turn leased to Packard-Bell, a computer manufacturer, one of the most successful computer manufacturers in the country right now, and they are at this moment manufacturing and turning out computers at Sacramento Army Depot. They currently are on their way to employing about 1,000 individuals. They project that possibly within the next couple of years that could increase to 3,000, which would in turn offset the business losses -- or the employment losses from the base.

This, of course, is something that is most welcome as we look at re-uses. We have a couple of other areas where we have some hopes for the future. One is Norton Air Force base, where also the property transfer has occurred. Just a week or so ago there was a ceremony at Norton to accept the transfer, the remaining parcels of the base. In the case of Norton it will be a little bit different from what happened to Sacramento Army Depot in that it's going to be more creating and building jobs a brick at a time. And this is -- I think what we're going to more typically see at military bases rather than the sudden, one big employer who solves all of your problems. I think it's going to be a little bit longer term, a more marketing oriented process.

At Norton they are very aggressive in seeking users. They currently have lined up employers for about 1,000 jobs. The base, I think, initially employed about 4,500 at the time of closure -- at the time of closure it was around 4,500. And they project that within -- by the end of the decade that they may well have about 10,000 jobs. That's what their goal is, more or less, is about 10,000 jobs for the base, and they believe they can make it there.

We have -- I believe that we're definitely moving in some right directions in the area of base re-use. Of course, as has been mentioned, In 1992 we had passage of CERCLA legislation which allowed parcelizing the bases and transferring contaminated areas on bases to allow reuse at the same time that the cleanup is occurring.

We've -- in 1993 we had the Pryor amendment passed, a very significant piece of legislation. Last year we had some very positive regulations that came out of Mr. Gotbaum's office to implement the Pryor amendment. We also had, very notably last year, a reform to the McKinney Homeless Assistance Act, which most of our communities are opting to fall into, to adopt, basically to take care of the homeless situation on the basis through the community plan rather than the previous procedure of homeless interests claiming property on the base without regard to the community plan.

We believe that there are more things that are needed in the coming year and we're looking forward to working with Mr. Gotbaum and with Congress and so forth to continue this process and to keep it moving in the right directions. And we -- as I say, we are optimistic about the future and we certainly hope to see more efforts of the sort that we've seen in the last couple of years.

Thank you.

MR. GOTBAUM: Can we -- now I think, why don't I just act as moderator -- but frankly we'll answer whatever questions you'll have.

Q: Mr. Gotbaum, I understand that all of these are actually owned by the military, they were DOD property. At the ATCOM facility -- (inaudible) -- in the St. Louis area, those buildings were rented from GSA. Does that complicate or make any difference in what the communities might be able to do and what help the Pentagon might give?

MR. GOTBAUM: It means that, obviously, GSA will be involved in the solution. But I fully expect that we will have a base transition coordinator to assist in the process at ATCOM, and that in effect the services that we provide we'll make sure are also available in St. Louis there as well.

Yes?

Q: The Navy nuclear power school at Naval Training Center Orlando has been directed, redirected to go to Charleston. Isn't that going to be more expensive than just

leaving it in Orlando? It's a good facility in Orlando, I understand. Why are you moving it – recommending you move it to Charleston? How much additional cost is that going to be? And was there any politics involved in that?

MR. GOTBAUM: Let me be very clear about the BRAC process. We run that process by the numbers. Congress basically designed the process, knowing that there would be political pressure in every single decision. And so they said, we want a process that we can tell people is done by the numbers, independently of politics, and that's the process we have.

In the case that you mention, the Navy, first of all, had more training capacity and more school capacity than they thought they needed.

They said we're sending submariners to Charleston for six months a year anyway, we've got extra real estate in Charleston, why don't we combine the two pieces of their training – one had been in Orlando, the other had been in Charleston – said why don't we do all that training in one place, which will do two things; one is it will enable us to save money and save the taxpayers money; and two is, it will enable submariners to spend a year in one place instead of two six- month hops. So that one is one that the Navy thought was of benefit to sailors and of benefit to taxpayers both.

Q: What about costs?

MR. GOTBAUM: It will benefit the taxpayers – a net savings.

Q: Do you have the figures?

MR. GOTBAUM: I don't. But I'm sure since every piece of information on the base closing process is publicly available, we can get it to you, and it's already in the reading room at the Base Closure Commission.

Yes, sir?

Q: Perhaps you covered this at the very outset, but excluding the round that was just recently announced, how many bases were scheduled to close, and how many actually, as you say, have the flag taken down?

MR. GOTBAUM: There are – the base closing process involves hundreds of different facilities. For our purpose of keeping track, there are about 70 in the first three rounds that have been slated to close, and about half of those have already had the flag come down.

Q: Those are major bases?

MR. GOTBAUM: Major bases, yes.

Yes, ma'am?

Q: I was wondering if any of the communities use tax-exempt bond financing in any way as part of their conversion.

MAYOR PODAGROSI: Not yet.

MAYOR RANDOLPH: No. But the example that I gave about the England Authority and Boise Cascade, the England Authority will do revenue – (they'll be /there'll be ?) the vehicle for revenues to do some bonds so Boise Cascade will be able to build that facility.

MR. GOTBAUM: Ben?

MR. WILLIAMS: Most of our communities will use the redevelopment law in California which involves the issuance of tax increment anticipation bonds, which I believe are tax exempt for state purposes, and I don't know about (federal ?) purposes.

Q: Josh, can you walk through the types and amounts of assistance that's available for reuse and retrainings and various other kinds of closing assistance?

MR. GOTBAUM: I can walk you through types. I can't put dollars on it. But let me start from – from day one, we in the Department of Defense offer, if you will, the following. One is we offer technical assistance. In our Office of Economic Adjustment we have people who've done economic development and reuse before themselves. They've been through the process of organizing, they've been through the process of figuring out what reuse makes sense and which ones don't. We also offer planning grants. These are usually cost shared, but not always, and their purpose, essentially, is to enable a community to get started, to hire initial consultants to say housing makes sense here, doesn't make sense there, et cetera.

In addition, as I mentioned, we have a base transition coordinator, an ombudsman or woman, whose job it is to provide access and coordination communication'. That's what we do in the Department of Defense. I should say that in addition, each service, each military department who is the landlord for whatever base generally provides some personnel, some judgment, some information.

For military personnel, we offer – we

obviously do relocation. For the civilians we offer job assistance and what is called the priority placement program to enable people to find other suitable jobs within the department and within the government, but if they can't, we also offer job training and job search assistance.

Beyond the Department of Defense, then, other federal agencies also have programs to assist base-closure communities. In commerce, the Economic Development Administration has a separate set of programs to both provide some planning assistance and also some infrastructure assistance. You may discover, as these mayors have, that you have a facility with lots of potential but not exactly the right infrastructure for development, so the Economic Development Administration has funded access roads, bridge improvements, et cetera, to enable these facilities to be reused.

The Department of Labor also has a series of broader job training programs and job training assistance programs. After the last base closure round, the secretary of labor, Bob Reich, said why don't we make sure that our people essentially go out there, and he set up a SWAT team, and as a result, people from the Department of Labor went and visited every base closure community. And again, we will make sure that those sorts of services are provided again.

Have I forgotten something?

Q: Just specialized uses – (off mike)?

MR. GOTBAUM: An important point. It is also true that we transfer property not only for job creation, although that's the one for which we have the latest authority, but also for parks, educational facilities, et cetera, and each federal agency that's involved with that provides some people to essentially assist the community in figuring out whether they can or cannot qualify as an airport, as an educational conveyance or as recreational park sorts of conveyance.

Q: For communities that might be just starting in on this process, where do they start? Is there a single point of contact for them, of do you have to go to each one of these agencies separately?

MR. GOTBAUM: For every community that starts, there will be a base transition coordinator.

Q: And that coordinator knows where to go in –

MR. GOTBAUM: That coordinator is going to be trained by us to know all of these programs and will be on site. In addition, for every community that's on (this background ?), there will be a project manager in the Office of Economic Adjustment, a person whose job it is to provide technical assistance and to get initial planning grants. And as a result, any base closure community today can call the Office of Economic Adjustment and say, "I am community x, I would like some initial help." By the time the base closure commission makes its recommendations and those recommendations acquire the force of law, which is this fall, there will be a base transition coordinator whose job it is to be helpful full-time.

Q: Every base that's on the current list has a designated ombudsman?

MR. GOTBAUM: Not yet. What we're doing now is we're picking the people and training them so that by the time the BRAC process is completed in October, we will have trained people assigned to each major base.

Q: If they don't have them there now. So what about the communities that are looking –

MR. GOTBAUM: Call the Office of Economic Adjustment. Okay?

Q: Let me ask the mayors and the representative from California, any or all of you: How much money did you all have to sink in, either of your own money or federal money, to kind of construction customize those bases to bring in the new facilities? I mean, how much did you have to put in for roads, if any, or new buildings to –

MAYOR PODAGROSI: I can answer that only partially because we're still in that process, but one of the things we've had to spend money on is, I think, about 25 percent for matching grants for most of the things that you get. So there is a good deal of money involved there.

My driving force in all of this planning has been to try to keep from having to raise taxes on this little old lady who lives over on Girard Street, who lives on Social Security.

I don't want her in – I don't want her taxes to have to go up to pay for changes we have to make out on the Chanute Air Force Base

properties.

We have yet to acquire the streets and water and those things. We do anticipate making some changes and it having to cost us some, but we are beginning to get some tax revenue off the other properties. We're hoping that that will offset what we have to spend on that. It won't be all of it by a long shot.

We're also trying to establish a TIF district over the Chanute properties by special state legislation, which will enable us to keep all of the property taxes active on those properties, not so much to help the individual developers, but to help us with things like roads and water plants and steam plants and things like that.

Q: What is TIF?

MAYOR PODAGROSI: Excuse me?

Q: What is TIF?

MAYOR PODAGROSI: TIF? Tax increment financing. Yeah, all the property tax raised there then -- rather than go to the different taxing bodies -- would go to the municipality to pay for those things. Yeah.

MR. GOTBAUM: Mayor Randolph -- (inaudible)?

MAYOR RANDOLPH: I'm not sure I could give you a total figure, but the state legislature for three years now -- and it's out -- has appropriated quite a bit of money, probably $2 million total, I guess -- something like that. And of course, I don't know how much -- do you know how much we're getting from the --

STAFF: From the Economic Development Administration, it's probably about 6 or 7 million for infrastructure.

MAYOR RANDOLPH: Yeah. And as I -- and for operational budget, it's -- of course we've spent more than we've taken in, but it's coming together quite nicely as we get more and more leases on-line.

MR. GOTBAUM: Ben, do you want to elaborate?

MR. WILLIAMS: Most of our bases don't have at this point good, concrete numbers in terms of estimates. We do have two that I'm aware of that have completed some rather extensive analysis of infrastructure costs. One is at Norton Air Force Base, where they did almost a building-by-building, structure-by-structure, street-by-street inventory, and they came with something in excess of $250 million as being the total cost over a period of time. Tustin Marine Corps Air Station similarly came up with -- I believe it was $171 million. Now these, of course, are long-term costs, and the largest portion of it is both on-base and off-base transportation needs -- mostly roads, widening roads, interchanges, main roads onto the base, and so forth.

In the case of Norton, which currently has been transferred, they have had some grants from EDA, and we're working on some state funding to help with some of the billing retrofit. The EDA grant, I think, was in the neighborhood of $7 or $8 million. The state retrofit money was around -- is around $1-1/2 million. There have been a few other small sources. The major source of revenue they have to look for is redevelopment funding, which currently for them provides them about $2 million a year. That actually is redirected state money because of the rather arcane methods that California has of collecting taxes and distributing them. So that -- and I anticipate at most bases -- that's going to be the main source of local revenue for infrastructure.

Okay.

STAFF: This is the last question.

Q: In terms of money -- federal money for some of these programs that you outlined just a couple of minutes ago, isn't it true that some of the rescissions -- and the president's '96 spending plan as well calls for less money for some of those programs that you outlined, than in the current budget or even in last year?

MR. GOTBAUM: In our budget in the Department of Defense, I believe that is not the case. That as far as I know nobody has proposed rescinding the transitions planning grants from the Office of Economic Adjustment, and nobody has proposed disestablishing base transition coordinators. In fact, we're -- because of the BRAC '95 round, we're increasing the budget allocation for planning grants to about $60 million -- $60 million? -- to about $60 million, if I recall correctly.

Q: From what?

MR. GOTBAUM: 49?

STAFF: 39.

MR. GOTBAUM: 39. From 39 to 60.

Q: From 39 FY '95 to 60 in FY '96?

MR. GOTBAUM: Yes.

Q: What's the total for overall federal budget from all the agencies?

MR. GOTBAUM: For base closures?

Q: Yeah.

MR. GOTBAUM: I would have to get back to you on that one. That's not a number I have on my fingertips. Why don't we see what we can find out on that score? Okay?

Thank you very much.

Q: Thank you.

END

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950504-10 LBS.

FROM: TRAUT, LAURI	TO: PIZER, CHUCK
TITLE: SAN GORGONIO CHAPTER	TITLE: DEP DIR OF COMM:
ORGANIZATION: SIERRA CLUB	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: CHINA LAKE	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON			
DIR./COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA			
COMMISSIONER COX			
COMMISSIONER DAVIS			
COMMISSIONER KLING			
COMMISSIONER MONTOYA			
COMMISSIONER ROBLES			
COMMISSIONER STEELE			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER	✓		
AIR FORCE TEAM LEADER			
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER	✓		
CHUCK PIZER	✓		

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING BACKGROUND MATERIALS ON SIERRA CLUB'S POSITION ON CHINA LAKE, LBS,

JACK CONNELL HAS INFO ON THIS IF YOU HAVE ANY QUESTIONS.

AMP

Due Date:	Routing Date: 950504	Date Originated: 950424	Mail Date:

930 CRESCENT DRIVE
BARSTOW CA 92311
April 29, 1995

Please refer to this number
when responding 950504-10

Dear Mr Peizer,

Enclosed is a set of background materials, Press release, and newspaper story about the Sierra Club's policy position on joint use of China Lake lands by the Army. This may be of assistance in responding to other press enquiries.

Sincerely
Laura Trent

Daggett • Yermo • Newberry Springs • Lenwood • Hinkley • Silver Lakes • Fort Irwin

Desert Dispatch

BHS boys, girls track teams whip SBHS
Page 6

Helping Hands
Page 5

25 cents tax included | Barstow, Calif. | Tuesday, April 25, 1995

Fort Irwin expansion plans revived

By TEYA VITU
Dispatch Staff Writer

FORT IRWIN — The National Training Center, immune from the Base Closure and Realignment Commission in the past six years, may be examined for realignment in the coming months, sources said.

Realignment is a matter of adding or removing functions and personnel, or changing missions. In Fort Irwin's case, realignment would involve the proposed expansion that has been under consideration since 1988.

The Army has looked toward to Silurian Valley to the east and northeast for the past four years. Before that the Army had proposed expanding to the south but in 1991 the U.S. Fish and Wildlife Service nixed the idea because of the desert tortoise, a threatened species.

The Sierra Club in recent months has suggested the Army look at the China Lake Naval Weapons Center range that touches on Fort Irwin, rather than setting aside more public land for military use.

"(The Sierra Club) believes that before the Army embarks on a $50 million land acquisition project east of Fort Irwin, the alternative of joint use of the adjoining Navy lands should be fully evaluated by independent experts," said Carol Sebastian, chair of the club's San Gorgonio Chapter.

> *(The Sierra Club) believes that before the Army embarks on a $50 million land acquisition project ... the alternative of joint use of the adjoining Navy lands should be fully evaluated by independent experts. One column quote here.*
>
> — Carol Sebastian, Sierra Club

In March the Sierra Club formally approached BRAC with a request for evaluation of the China Lake option.

BRAC Chairman Alan Dixon said the commission would consider the idea and BRAC staff is analyzing it, BRAC spokesman Chuck Pizer said.

On May 10 the commission will announce additions to the Pentagon's list of bases recommended for consideration for closure or realignment. The Pentagon's list was submitted in February. BRAC additions typically serve as comparisons.

The Sierra Club maintains the Navy has always resisted efforts to share the China Lake facility with Fort Irwin, claiming Army training would be incompatible, Sebastian said.

Sebastian said the compatibility issue has no merit since the Army regularly moves through Goldstone and the operations at the Deep Space Communications Complex are not affected.

Additionally, troops rotating to Fort Irwin now land at Edwards Air Force Base — a facility that previously had claimed incompatibility with Army training.

"The experiences with NASA and now Edwards suggest to many desert users, not just the Sierra Club, that successful deconfliction of mission incompatibilities is very possible," Sebastian said in a prepared statement.

The Army is examining a 330,000-acre area in the Silurian Valley. Mock battles would not be fought there. The area would be used for logistics and assembling battalions before they head out for training. About half of the acreage is suitable for combat vehicles.

The Army recently removed 20,000 acres at the southeast extreme of the project area from consideration.

The U.S. Fish and Wildlife Service a year ago issued a "no jeopardy" biological opinion on the Silurian Valley land, meaning no threatened or endangered species would be affected by Army training.

A draft environmental impact report should be ready for public inspection later this year.

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PRESS RELEASE

FOR RELEASE:

Friday, April 21, 1995

FOR ADDITIONAL INFORMATION CONTACT:

Ms. Anne Dennis
Conservation Coordinator
San Gorgonio Chapter Office, The Sierra Club
568 No. Mountain View, Suite 130
San Bernardino, California 92401
Tele: (909) 381-5015

Public Affairs Officer
Defense Base Closure and Realignment
Commission
1700 North Moore Street, Suite 1425
Arlington, Virginia 22209
Tele: (703) 696-0504

Public Affairs Office
National Training Center
ATTN: AFZJ-PA
Fort Irwin, California 92310-5000
Tele: (619) 380-4511

Lieutenant Colonel David E. Schnabel (RET)
P. O. Box 13209
Fort Carson, Colorado 80913
Tele: (719) 576-1217

MORE - MORE - MORE - MORE

BASE COMMISSION CONSIDERING ARMY TANK TRAINING

ON NAVY LAND AT CHINA LAKE

Carol Sebastian, Chair of the 5,000-member San Gorgonio Chapter of the Sierra Club, announced today that the Defense Base Closure and Realignment Commission is now reviewing and analyzing a Sierra Club proposal for shared use of land at the China Lake Naval Air Warfare Station for tank training by units at the Army's National Training Center at Fort Irwin, California.

"I am pleased to be able to report that former Senator Alan Dixon, Commission Chairman, has informed the San Gorgonio Chapter that the Commission is now reviewing and analyzing our resolution and supporting documents," Sebastian said.

After three months of analysis and discussion, the Executive Committee of the San Gorgonio Chapter passed a formal resolution at its March 25th meeting calling on the Commission to independently evaluate the feasibility of the Army National Training Center at Fort Irwin (NTC) using approximately 350,000 gross acres on the adjoining China Lake Mojave Range B. The NTC is the Army's premier tank and maneuver training facility to which an average of 4,000 to 6,000 troops from Army facilities nationwide are sent monthly for intensive combat exercises called "rotations".

The Sierra Club action was taken to suggest a fiscally and environmentally preferable alternative to an Army proposal to acquire approximately 330,000 gross acres in the Silurian Valley east of Fort Irwin.

Since 1985 when the Army completed a land use requirements study that first documented the need for additional training land, the Army has evaluated more than a dozen possible options to meet a maneuver land shortfall averaging approximately 230,000 acres per rotation. The training land shortfall was independently reviewed and validated by the Congressional General Accounting Office (GAO) in 1991 and internally revalidated by the Army in 1993.

In repeated efforts since 1986 to optimize the use of existing Department of Defense assets and hold down costs to the taxpayers, the Army has made numerous requests to make part-time use of adjacent Navy land in China Lake's Mojave Range B. The Navy's response to every Army request has been that "mission incompatibility" prohibits sharing land with the Army.

"Unlike the Army which submitted its analyses to independent review and validation by the GAO, the Navy's asserted claims of 'mission incompatibility' have never been independently evaluated" noted Chapter Chair Sebastian. "For years, the Air Force asserted that 'mission incompatibility' prevented Army troops headed for training at the NTC from landing at Edwards Air Force Base.

There's been no mission change at Edwards, but thousands of troops on their way to Fort Irwin for training have been landing there for several months. NASA's Goldstone Deep Space Tracking Station on Fort Irwin has a mission even more 'incompatible' with tank training than what the Navy does at China Lake, but the Army and Goldstone have worked successfully side-by-side for decades through the Pioneer, Voyager, Magellan and other deep space projects. The experiences with NASA and now Edwards suggest to many desert users - not just the Sierra Club - that successful deconfliction of 'mission incompatibilities' is very possible.

"The overwhelming majority of Sierra Club members in San Bernardino County believe that before the Army embarks on a 50 million dollar land acquisition project east of Fort Irwin, the alternative of joint use of the adjoining Navy lands should be fully evaluated by independent experts. That's why we contacted the offices of both United States Senators, the Washington office of Representative Jerry Lewis, and all eight members of the Defense Base Closure and Realignment Commission to request such an evaluation," said Sebastian.

High desert resident Jon Miller, Conservation Committee Chair of the Sierra Club's Mojave Group, gives further evidence that support for an independent investigation of the Navy's opposition to sharing land with the Army extends into the defense establishment. "Although my personal career is wholly dependent

upon the defense industry," said Miller, "I detest the thought of any military agency absorbing more public lands. After several decades, our fragile desert still bears visible scars from General Patton's tanks. If the NTC is to expand, then inter-service rivalry should be overcome to enable time sharing of the Navy's already damaged lands at China Lake."

The Sierra Club's actions and the Defense Base Closure and Realignment Commission's favorable response have not gone unnoticed by present and retired officers who have served at the National Training Center. Although current NTC spokesmen have declined comment on the Sierra Club's request for a Commission investigation of the China Lake situation, former NTC Public Works Director (1990-94), Lieutenant Colonel David E. Schnabel (RET), appeared cautiously, if only partially, supportive.

"The interests of our nation will be best served by the NTC obtaining more maneuver land," said Schnabel. "Nevertheless, satisfying this requirement by exclusively burdening the taxpayers with the purchase of vast amounts of public land must give way to a more acceptable course of action containing a combination of joint use of adjoining Navy lands and the conservative acquisition of public lands."

Carol Sebastian concluded her remarks saying, "Many desert users share the Sierra Club's view that the public lands in the Silurian Valley should not be used for Army training. Miners,

recreational users, grazers, and others believe that the Silurian Valley should remain open to public use, although there is continuing debate about what those uses should be. We urge all those concerned about military training to join with us in supporting joint use of China Lake lands for Army training. Please call or write Senators Boxer and Feinstein and Representative Lewis as well as the Defense Base Closure and Realignment Commission before May 5th.

"You can leave messages for Commission Chairman Alan Dixon and Commissioner Rebecca Cox, the lone California member, by calling (703) 696-0504. You can write to Mr. Dixon and Ms. Cox at:

Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, Virginia 22209"

According to Chairman Dixon, "The Base Closure and Realignment Act provides that any additions to the list of bases recommended for closure or realignment by the Secretary of Defense must be published in the Federal Register by May 17th.... In order to have a base added to this list, a Commissioner must offer a motion to add an installation for consideration. A majority of [the eight] Commissioners must support such a motion for the base to be added for consideration."

The Senate confirmed the appointment of the eight members of Defense Base Closure and Realignment Commission in late February. They are: Al Cornella from South Dakota; Rebecca Cox from California; J. B. Davis from Florida; Chairman Alan Dixon from Illinois; S. Lee Kling from Missouri; Benjamin F. Montoya from New Mexico; and Josue Robles Jr. and Wendi Steele, both from Texas.

The San Gorgonio Chapter of the Sierra Club covers San Bernardino and Riverside Counties. Chapter offices are located at in San Bernardino.

-30-

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Please Respond to:

930 Crescent Drive
Barstow, California 92311

April 6, 1995

Honorable Alan Dixon, Chairman
Base Realignment and Closure Commission
1700 No. Moore Street, Suite 1425
Arlington, Virginia 22209

RE: Sierra Club Request for BRACC Review and Possible Realignment of the Naval Air Warfare Station, China Lake, California

Dear Chairman Dixon:

The San Gorgonio Chapter of the Sierra Club requests that your Commission add the China Lake Naval Air Warfare Station (NAWS) to your list of installations to be considered for possible realignment. The formal call for such action is included under item number four (4) of the policy resolution adopted by the Chapter's Executive Committee at its March 25, 1995 meeting.

The basis for the request is discussed at length in the accompanying background reports submitted to the members of the San Gorgonio Chapter's Conservation and Executive Committees. In summary, the San Gorgonio Chapter questions the Navy's repeated assertions of mission incompatibility as the reason that not one square inch of the 1,100,000 acres comprising China Lake NAWS can be made available for joint maneuver training use with the adjacent Army National Training Center (NTC) at Fort Irwin.

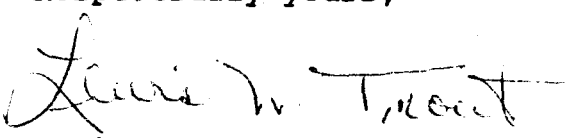
The Navy claims that contractor demand for use of test facilities on the Mojave Range B of NAWS on only three days notice precludes coordinated use for up to 14 days monthly by the Army. As a result, the Army now proposes to spend nearly $50,000,000 for acquisition of land east of Fort Irwin to meet a shortfall in training acreage validated by GAO in 1991. Unlike the Army, to the best of the Sierra Club's knowledge, the Navy has never submitted its mission incompatibility assertions to independent review by GAO or appropriate Congressional Committees. Personally, it seems to me that the Navy has surrendered its responsibility for management of its land and ranges if we have a situation in which contractors tell Naval personnel when Department of Defense (DoD) assets will be used. The Navy and DoD need to tell contractors when DoD

resources will be available for contractor use, not the other way around.

We in the Sierra Club do not believe that you should allow to go unchallenged what may be parochial views dating from the 1940's regarding exclusivity and opposition to sharing assets with other military departments when joint use is in the best interests of the nation. Your present round of hearings provides an opportunity to independently confirm or refute the Navy's currently unvalidated claims. Certainly your review of the validity of the Navy's position is appropriate before the Army embarks on a land acquisition program projected to cost the taxpayers nearly $50,000,000. If you independently conclude that the Navy's position is justifiable, so be it. At least the issue will have been finally evaluated and analyzed once and for all by fiduciaries representing the best interests of the taxpayers, not special interests.

Thank you for your consideration.

Respectfully yours,



Lewis W. Trout, Member
Conservation Committee

cc: (with enclosures)
Mr. Al Cornella
Ms. Rebecca Cox
Mr. J. B. Davis
Mr. S. Lee Kling
Mr. Benjamin F. Montoya
Mr. Josue Robles, Jr.
Ms. Wendi Steele

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

Please refer to this number
950407ZK

April 9, 1995

Mr. Lewis W. Trout
Sierra Club, San Gorgonio Chapter
930 Crescent Drive
Barstow, California 92311

Dear Mr. Trout:

Thank you for your letter regarding urging the Commission to consider the realignment of the Naval Air Warfare Station, China Lake, California. You may be assured that I will share your thoughts with the other members of the Commission.

The Base Closure and Realignment Act provides that any additions to the list of bases recommended for closure or realignment by the Secretary of Defense must be published in the Federal Register by May 17. This would include any decisions to reconsider a previous Commission's actions if such action had not been recommended by the Secretary. In order to have a base added to this list, a Commissioner must offer a motion to add an installation for consideration. A majority of Commissioners must support such a motion for the base to be added for consideration.

The information that you have provided will be placed in the Commission's library and utilized by the Commission in our review and analysis process.

I look forward to working with you during this difficult and challenging process. Please do not hesitate to contact me whenever you believe I can be of service.

Sincerely,

Alan J. Dixon
Chairman

AJD:cmc

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INTERIM POLICY ON NATIONAL TRAINING CENTER (NTC)

LAND ACQUISITION PROJECT (FORT IRWIN, CALIFORNIA)

Resolved that the San Gorgonio Chapter of the Sierra Club:

(1) opposes and calls on the Department of Defense (including but not limited to the Commander of the National Training Center, the Secretary of the Army, and the Secretary of Defense) to renounce any and all northerly land acquisition project alternatives that would require deletion of any lands located within the presented boundaries of Death Valley National Park;

(2) opposes and calls on the Department of Defense (including but not limited to the Commander of the National Training Center, the Secretary of the Army, and the Secretary of Defense) to renounce any and all southerly land acquisition project alternatives that would require use of lands for which the U. S. Fish and Wildlife Service issued a "Draft Jeopardy" biological opinion in September 1991;

(3) calls on the General Accounting Office of Congress (GAO) to review and analyze the 1993 Land Use Requirements Study (LURS) prepared by the Department of the Army to determine if the NTC's asserted training land shortfall averaging 222,000 acres per training rotation is accurate and realistically addresses the Army's asserted additional land requirement;

(4) calls on the GAO, Base Realignment and Closure Commission (BRACC), and/or the Armed Services Committee of the United States Senate to investigate, review, analyze and evaluate the validity of the assertion by the Department of the Navy that mission incompatibility precludes any and all NTC joint use of the approximately 350,000 acres of land on the 550,000 acre Mojave Range B of the China Lake Naval Air Warfare Station (NAWS) that were not designated as critical habitat for the desert tortoise in the "Final Rule" published by the U. S. Fish and Wildlife Service in the Federal Register on February 8, 1994 (Vol. 59, No. 26); and

(5) opposes any Army **eastward land acquisition and** training on BLM administered public lands in the Silurian Valley until full compliance with the National Environmental Policy Act (NEPA) has been achieved, including but not limited to:

(a) public release of a Draft Environmental Impact Statement (DEIS) which includes as one of the project alternatives carried forward for full analysis joint use by the NTC of the approximately 350,000 acres of land on the 550,000 acre Mojave Range B of the China Lake Naval Air Warfare Station (NAWS) that were not designated as critical habitat for the desert tortoise in the "Final Rule" published by the U. S. Fish and Wildlife Service in the Federal Register on February 8, 1994 (Vol. 59, No. 26);

(b) holding public hearings on the proposed project following release of the DEIS including at least one hearing in the San Bernardino/Riverside area; and

(c) completion of and public release of a Final EIS and associated Record(s) of Decision.

ADOPTED AS AMENDED BY: SAN GORGONIO CHAPTER EXECUTIVE COMMITTEE (12-2-2), March 25, 1995

Note: The agenda item 4 Executive Committee report regarding the proposed interim policy on the NTC Land Acquisition Project was amended by the Executive Committee. The amending language inserted in line 1 of section 5 (**"eastward land acquisition and"**) was the only change made to the proposal submitted from the Conservation Committee.

No further text below this line.

SAN GORGONIO CHAPTER EXECUTIVE COMMITTEE

ACTION ITEM

AGENDA ITEM NUMBER: 4

MOTION:

SUBMITTED BY: SAN GORGONIO CHAPTER CONSERVATION COMMITTEE (13-0-1-1, 3/13/95)

PROPOSED INTERIM POLICY ON NATIONAL TRAINING CENTER (NTC)

LAND ACQUISITION PROJECT (FORT IRWIN, CALIFORNIA)

Resolved that the San Gorgonio Chapter of the Sierra Club:

(1) opposes and calls on the Department of Defense (including but not limited to the Commander of the National Training Center, the Secretary of the Army, and the Secretary of Defense) to renounce any and all northerly land acquisition project alternatives that would require deletion of any lands located within the presented boundaries of Death Valley National Park;

(2) opposes and calls on the Department of Defense (including but not limited to the Commander of the National Training Center, the Secretary of the Army, and the Secretary of Defense) to renounce any and all southerly land acquisition project alternatives that would require use of lands for which the U. S. Fish and Wildlife Service issued a "Draft Jeopardy" biological opinion in September 1991;

(3) calls on the General Accounting Office of Congress (GAO) to review and analyze the 1993 Land Use Requirements Study (LURS) prepared by the Department of the Army to determine if the NTC's asserted training land shortfall averaging 222,000 acres per training rotation is accurate and realistically addresses the Army's asserted additional land requirement;

(4) calls on the GAO, Base Realignment and Closure Commission (BRACC), and/or the Armed Services Committee of the United States Senate to investigate, review, analyze and evaluate the validity of the assertion by the Department of the Navy that mission incompatibility precludes any and all NTC joint use of the approximately 350,000 acres of land on the 550,000 acre Mojave Range B of the China Lake Naval Air Warfare Station (NAWS) that were not designated as critical habitat for the desert tortoise in the "Final Rule" published by the U. S. Fish and Wildlife Service in the Federal Register on February 8, 1994 (Vol. 59, No. 26); and

BACKGROUND REPORT

did validate the former 1985 LURS basis for the project, but a more timely update is appropriate);

(3) the absence of any independent verification and validation of Navy's repeated assertions (in response to numerous Army requests made since 1986) that no land on the China Lake Naval Air Warfare Station (NAWS) can be used by the Army on a time-shared basis because of "mission incompatibilities" (NASA's Goldstone Deep Space Tracking Station with missions even more "incompatible" than the Navy's has operated successfully on Fort Irwin since the 1950's despite on-going Army training and heavy vehicle movements. This suggests that deconfliction of asserted Navy "incompatibilities" in an environmentally responsible manner is technically possible and achievable based on the Army/NASA record of more than 30 years);

(4) the very timely opportunity for the Base Realignment and Closure Commission (BRACC) to independently evaluate the Army's asserted land needs and the Navy's unwillingness to permit joint use of China Lake because of jurisdiction assigned to the Commission by Congress (see attached BRACC schedule); and

(5) the 1993 decision by the Bureau of Land Management (BLM), the Lead Agent for the Land Acquisition Project EIS not to include full consideration and analysis in the Draft EIS of (an) alternative(s) involving joint use of lands located on the China Lake Naval Air Warfare Station to meet the Army's asserted need for more training land.

(6) the opportunity to more appropriately address the proposed RCC resolution and items 5 to 9 from Mr. Trout's alternative resolution at the April Conservation Committee meeting.

NOTE: The bold text was omitted from Mr. Trout's motion adopted by the Conservation Committee despite comments by at least three Conservation Committee members regarding the BRACC process and need to consider western land acquisition alternatives in the Draft EIS. The additional language is included for Ex-Com consideration to more fully reflect the intentions of the maker and seconder of the motion and the Conservation Committee majority that supported the call for the independent reviews and analyses included in sections 3 and 4 of the five point recommendation.

ARGUMENTS FOR: Although several of the arguments for are included in the full alternative 10 point policy proposal submitted by Mr. Trout, several points deserve special emphasis.

(1) The Administration and the Army should be asked to renounce environmentally and fiscally irresponsible southern and northern land acquisition alternatives advocated by some Congressional leaders especially in a time of budgetary constraints. Although the Commander of the National Training

Center (NTC) does not have delegated authority to make such a decision, he can state his recommendations and position publicly if he so chooses. Since 1988, there are no known instances of denial or reversal of recommendations made by the NTC Commander regarding lands to be considered for possible acquisition to meet the Army's asserted land shortfall.

(2) Because of environmental and budget constraints, the Departments of Interior and Defense should be required to evaluate joint use of adjacent Department of Defense lands on China Lake BEFORE seeking more than $80,000,000 to acquire, instrument, and responsibly prepare to manage any additional public domain and privately owned lands in the Silurian Valley. Even though a reasonable alternative such as joint use of Navy lands by the Army may be outside the scope and ability of an agency (the Army in this case) to implement by itself, the intention of Congress as expressed in the National Environmental Policy Act is that such reasonable alternatives be considered and evaluated. Congress will then make the decision about what should be done.

(3) Independent review of the Army's Land Use Requirements Study and the Navy's denial of Army requests to use portions of China Lake do not mean that the Sierra Club supports Army maneuvers on China Lake (the Club does not at this time). Rather, the Sierra Club supports compliance with the National Environmental Policy Act and fiscally responsible, environmentally sustainable governmental policies, which may include joint use of military lands by two or more military services instead of acquiring new lands. Congress had delegated authority for such reviews to the Base Realignment and Closure Commission which is now evaluating operations on military bases nationwide.

(4) Since no Draft EIS on this project has been released, deferral until April of action on items 5 to 9 of Mr. Trout's alternative resolution and on the RCC proposed interim policy resolution will not adversely affect the Chapter's ability to take timely and comprehensive interim and final positions on the NTC Land Acquisition Project.

ARGUMENTS AGAINST The NTC does not support the interim policy recommendation by the Conservation Committee. Specifically, the NTC does not support calling for GAO, BRACC, and/or the Senate Armed Services Committee to independently review, evaluate, and analyze the Navy's methodology in arriving at its conclusions that Army training on adjacent Navy land is not "mission compatible." The Army also does not support the inclusion of western alternatives in the Draft EIS involving joint use of adjacent Navy lands since such alternatives are outside the ability of the BLM (the lead agent for the EIS) and the Army to implement. The NTC also opposes inclusion of the Commander of the NTC in items 1 and 2 of the recommended five point interim policy because the decision making authority in such matters does not rest at that level.

Base closing process is under way

By JEANNINE CLEGG
Dispatch Washington Bureau

WASHINGTON — Most of the nation's military base communities will be rejoicing with relief rather than panicking Tuesday when the Pentagon releases its 1995 base closing recommendations.

One reason may be that for weeks — and in some cases months — their elected, appointed and paid representatives have been lobbying the Pentagon to keep bases in their back yards from being placed on the list.

But the more likely reason is that Pentagon officials have said repeatedly in recent weeks that the recommended closure list will not be as long as had been planned for 1995. Previous estimates were that the 1995 round of closings would be larger than any of the previous three rounds.

Bases that are on the Pentagon's 1995 hit list have a great chance of eventually being closed. Members of the independent base closing commission will decide which communities win and lose. Losers will take a major shot to their economic base.

"It's a nervous time for us," said Tom Rupli of Defense Realignment Advisers, a Washington firm that represents seven community groups fighting to keep bases open.

Everything the company has done for its clients over the last year has been in preparation for the Pentagon list, Rupli said.

The Pentagon list is not the end of the process, however.

The 1995 base closing commission may add bases to Pentagon recommendations any time before May 17.

That is why many communities will not give up their lobbying efforts until the base closing process is over.

The base closing commission is responsible for reviewing the Defense Department's recommendations to make sure it has not "deviated substantially" from its force structure plan.

Commissioners visit bases, hold regional hearings, listen to congressional and other testimony and determine which bases should be recommended to the president for closure.

And they must do all of that in four months.

Base closings: What happens next?

By JEANNINE CLEGG
Dispatch Washington Bureau

WASHINGTON — As the 1995 base closing commission nominees await confirmation, deadlines are approaching in the base closing process.

Here is a rundown of key dates:

Feb. 28: Defense Secretary William Perry will formally release the Pentagon's list of recommended closures.

March 1: The defense base closing commission must be confirmed. Commission hearings begin to discuss the Pentagon's list. Perry and the chairman of the Joint Chiefs of Staff are scheduled to testify.

March 6-7: Defense Department service chiefs will testify at base closing commission hearings.

March 16: Base closing commission hearing on base reuse and post closure.

Mid- to late March: Commissioners will begin visiting bases recommended for closure by the Pentagon.

April 15: General Accounting Office makes its report to the commission and Congress on the Defense Department's base selection process.

May 17: Commission announces its proposed changes to the Pentagon base closure recommendations. Afterwards, commissioners will begin visits to bases added to the list.

July 1: Commission sends its recommendations to President Clinton.

July 15: President approves or rejects the commission report. If approved, the list goes to Congress. Congress has 45 days to disapprove the list, but the president may veto congressional disapproval.

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950213-1

FROM: CONNELL, JACK	TO: PERRY, WILLIAM
TITLE: EXECUTIVE DIRECTOR	TITLE: SEC. OF DEFENSE
ORGANIZATION: IWV 2000 PARTNERSHIP FOR PROGRESS	ORGANIZATION: DEPT. OF DEFENSE
INSTALLATION (s) DISCUSSED: NAVAL AIR WARFARE STATION CHINA LAKE	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL			
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON	✓		
DIR./COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER			
COMMISSIONER			
COMMISSIONER			
COMMISSIONER			
COMMISSIONER			
COMMISSIONER			
COMMISSIONER			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER	✓		
AIR FORCE TEAM LEADER			
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER	✓		

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks: LETTER IN SUPPORT OF CHINA LAKE; RE: AIR QUALITY

Due Date:	Routing Date: 950213	Date Originated: 950209	Mail Date:

IWV 2000
PARTNERSHIP
FOR PROGRESS
Ridgecrest-Inyokern-China Lake, California

Please refer to this number
when responding 950213 - 1

February 9, 1995

Honorable William Perry
Secretary of Defense
The Pentagon
Washington, DC 20301

Dear Secretary Perry,

As you prepare to make your final recommendation on BRAC 95 base closures and realignments, we wish to clarify the status of the Naval Air Warfare Station China Lake relative to air quality.

Due in part to its extreme size of 1.1 million acres, China Lake is encompassed by three separate and distinct air districts. Enclosures (1), (2) and (3), signed by their respective Air Pollution Control Officers, provides the current status of air quality standards attainment in each district. Each letter also provides their comments on potential growth at China Lake.

The vast majority of China Lake's laboratories, test facilities and personnel are located in that portion of the base within the Kern County Air Pollution Control District. Enclosure (1) indicates that while technically designated non-attainment for PM-10, all requirements have been met for attainment status. Kern County is preparing the data submission to EPA and fully expects favorable EPA action on an attainment petition. Kern County is also designated non-attainment for ozone, however recently completed attainment demonstrations project attainment as early as 1997, and not later than 1999. It is important to note that this includes a provision for 15% growth in China Lake's ozone emissions.

A smaller portion of China Lake's facilities are located within the Mojave Desert Air Quality Management District. As indicated by enclosure (2), while technically designated non-attainment for PM-10, all attainment requirements were met during 1994. A data submission and attainment petition are in preparation for submission to EPA. Favorable EPA action is expected.

P.O. Box 2000, Ridgecrest, California 93556
815 North Downs Street, Suite D
(619) 371-BRAC (371-2722)
Fax: 619-371-2724

A large portion of China Lake's range area, but relatively few facilities and personnel, are located within the Great Basin Unified Air Pollution Control District. Enclosure (3) indicates a status of non-attainment for PM-10, however notes that, "The contribution of emissions from NAWS (China Lake) to the non-attainment situation is negligible." Further, future growth at China Lake is unlikely in this portion of the base. Future growth is most likely in the already developed portion located in the Kern County Air Pollution Control District, discussed above.

While the foregoing is a factually accurate summarization of the technical status of air quality standards, it is also important to understand the basis upon which these determinations were made.

First, China Lake and East Kern County were arbitrarily included by EPA with greater Kern County due to an absence of approved monitoring equipment in the local area. Greater Kern County and Bakersfield are impacted by air pollutants originating in central and northern California and transported by wind into the southern San Joaquin Valley. China Lake and East Kern County are located over 100 miles to the east across the Sierra Nevada mountain divide, in an air basin entirely separate from the San Joaquin Valley.

Second, those very few pollutants which are present in the China Lake area are principally transport pollutants originating in the San Joaquin Valley and South Coast Air Basin. The EPA has recognized this area as "overwhelmingly" impacted by transport pollutants, and is on record as favoring special consideration in mitigation of this unusual situation.

And third, the actual pollutants emitted at China Lake are minimal. The quote in enclosure (3) is germane, "The contribution of emissions from NAWS (China Lake) to the non-attainment situation is negligible."

The Navy chose China Lake over fifty years ago in large part for its excellent air quality to support ground and flight test operations. That choice is still valid today. We believe that careful review of the data presented in enclosures (1) through

(3) will fully support a positive conformity determination that moderate growth at China Lake will not increase emissions over baseline levels, and will not cause or contribute to any air quality violations.

Sincerely,

Jack P. Connell
Executive Director

Enclosures (3)

Copy to:
Base Realignment and Closure Commission
Congressman Bill Thomas
Senator Dianne Feinstein
Senator Barbara Boxer
Governor Pete Wilson
Kern County Board of Supervisors

AIR POLLUTION CONTROL DISTRICT
THOMAS PAXSON, P.E., Director
2700 "M" STREET, SUITE 290
BAKERSFIELD, CA 93301
Phone: (805) 861-2593
FAX: (805) 861-2595

RESOURCE MANAGEMENT AGENCY
JOEL HEINRICHS, AGENCY DIRECTOR
Air Pollution Control District
Engineering & Survey Services Department
Planning & Development Services Department
Transportation Management Department
Waste Management Department

January 23, 1995

Honorable William Perry
Secretary of Defense
The Pentagon
Washington, DC 20301

SUBJECT: Air Quality as a Criterion to Determine if Naval Air Weapons Station, China Lake, Should Be Considered for Growth

Dear Secretary Perry:

It has come to my attention that the Department of Defense may be planning to use National Ambient Air Quality Standards attainment/non-attainment designations as a criterion for determining if the Naval Air Weapons Station (NAWS), China Lake, should be considered for growth. If this is the case, it is not appropriate.

NAWS, China Lake, is located predominantly within the Kern County Air Pollution Control District (KCAPCD) and in an area designated in 1990 by the U.S. EPA as "non-attainment" for PM_{10} (respirable particulates) and ozone ("smog"). Since 1990, no PM_{10} exceedances have been recorded in the NAWS area and during 1994 no ozone exceedances were recorded. This area is, and EPA agrees, well on its way to attainment for PM_{10} and ozone.

Furthermore, KCAPCD has prepared "attainment demonstrations" as required by the 1990 Federal Clean Air Act Amendments for both PM_{10} and ozone. The PM_{10} Attainment Demonstration projected attainment by year end 1994 (this has occurred) and the ozone Attainment Demonstration projects attainment by 1999. (This may occur by 1997.) The ozone demonstration provides for 15% growth in NAWS ozone forming emissions by 1999.

In summary, while it is true NAWS is located in a PM_{10} and ozone non-attainment area, this area is now attainment for PM_{10} and KCAPCD is able to demonstrate ozone attainment for this area even with 15% growth assigned to NAWS. (Necessary reductions come from other sources.)

The preceding information is provided to enable you to make your decisions on facts pertinent to NAWS, China Lake. Please feel free to have your staff contact me at (805) 861-2593 if there is any additional information I can provide.

Sincerely,

Thomas Paxson, P.E.,
Air Pollution Control Officer

TP:bjm
TPL081
cc: IWV-2000

Enclosure 2

Mojave Desert
Air Quality Management District

MDAQMD

15428 Civic Drive, Suite 200, Victorville, CA 92392-2383
(619) 245-1661 Fax No. (619) 245-2699

Charles L. Fryxell
Air Pollution Control Officer

January 24, 1995

Honorable William Perry
Secretary of Defense
The Pentagon
Washington, D.C. 20301

SUBJECT: AIR QUALITY AS A CRITERION TO DETERMINE IF NAVAL AIR WEAPONS STATION, CHINA LAKE SHOULD BE CONSIDERED FOR GROWTH

Dear Secretary Perry:

It has come to my attention that the Department of Defense may be planning to use National Ambient Air Quality Standards attainment/non-attainment designations as a criterion for determining if the Naval Air Weapons Station, China Lake (NAWS) should be considered for growth. If this is the case, it is not appropriate.

The portion of NAWS located within the Mojave Desert Air Quality Management District (District) was designated by U.S. EPA as "non-attainment" for PM_{10} (respirable particulates). There have been no PM_{10} exceedances recorded in the NAWS area since 1990. The District has prepared "attainment demonstrations" as required by the 1990 Federal Clean Air Act Amendments for PM_{10}. The PM_{10} Attainment Demonstration projected attainment by year end 1994. There has not been an exceedance of the PM_{10} National Ambient Air Quality Standards in this area in the past three years. There are no other exceedances of National Ambient Air Quality Standards for the portion of NAWS in the District.

In summary, while it is true NAWS is located in a PM_{10} non-attainment area, this area is now attainment for PM_{10}. Hopefully, this information will be used by your committee to determine the true air quality issues in your decision making process.

Please feel free to call me if you have any questions.

Sincerely,

CHARLES L. FRYXELL, APCO
MOJAVE DESERT AQMD

cc: Indian Wells Valley 2000

Ellen Hardebeck
Control Officer

Enclosure 3

GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short St. Suite #6 - Bishop, CA 93514
(619) 872-8211

January 28, 1995

The Honorable William Perry
Secretary of Defense
The Pentagon
Washington, D.C. 20301

Dear Secretary Perry:

Re: Air Quality Attainment Status as a Criterion for Growth at NAWS, China Lake

It is my understanding that you may use National Ambient Air Quality Standards (NAAQS) attainment/non-attainment status to determine which military bases will be considered for growth.

Several pieces of the Inyo County portion of the Naval Air Weapons Station (NAWS) at China Lake are currently non-attainment for the 24-hour PM-10 NAAQS. However, Owens Dry Lake is the cause of the air quality problem in part of the county and an abandoned agricultural field was the cause of the NAAQS violations in the other part. The contribution of emissions from NAWS to the non-attainment situation is negligible.

I hope this information will help you in your deliberations. If you wish further information, please let me know.

Sincerely,

Ellen Hardebeck

Ellen Hardebeck
APCO

Kirtland → Beale

1998

4 HC-130
7 HH-60
3 MC-130
4 MH-53
4 TH-53
4 UH-1

4 HC-130
Coast Guard. est. 1997

Roop: Okinawa move. SC2 ROOP: Just sorry "to big of a unit" we estimated.

Beale

Tinker 30 AWACS E-3 [KC 135-R's]

or

Robins

4T Beale

Currently Here

34 U-2
8 KC-135
10 T-38

Nurre, Deirdre

From: Cirillo, Frank
To: Cantwell, Frank
Cc: Ackerman, Steve; Beyer, Merrill; DiCamillo, Rick; Hall, Craig; Nurre, Deirdre; Olson, David; Pross, Mark
Subject: FW: Receiver bases
Date: Tuesday, May 16, 1995 3:22PM

FXC: Please take the lead on getting Deirdre this info. Get with Rick (Malmstrom 135s), Recall the McClellan/Mather Res 135s, Craig (Moffitt??) and give her a minimum =(Res 135s), median=(+ 58th), maximum =(+ Moffitt rescues) + any others?. fc

---

From: Nurre, Deirdre
To: Cirillo, Frank
Subject: Receiver bases
Date: Tuesday, May 16, 1995 12:30PM

Frank:
Can you tell me some info about Beale: What is the maximum number of planes that are being contemplated to be sent to Beale? We need to have an upper ceiling of aircraft # being contemplated (for purposes of computing an emissions "budget").

Second, what is the time frame over which the total aircraft mentioned above might be sent to Beale?

I need to provide this number to the Calif Air Resources Board, who are rushing into action to do their part for National Defense.

Document Separator

Point Paper
on
Kirtland AFB (KAFB) Air Quality

Kirtland Air Force Base Air Quality Status (During BRAC Review Process)

- KAFB is located in the Albuquerque/Bernalillo Air Quality Control Region (AQCR)
  - -- The AQCR is in moderate nonattainment for carbon monoxide (CO)
    - --- The AQCR has experienced three years of no emission violations for CO - Petitioning the EPA to reclassify the area from nonattainment to maintenance
      - ---- Reclassification does not eliminate Conformity Analysis requirements
- Major sources of air emissions are Phillips Laboratory, 58th Special Operations Wing, New Mexico Air National Guard, DOE (Sandia National Laboratory), motor vehicle emissions and transient aircraft
  - -- CO emission inventory suggests 97% of emissions come from automobiles
    - --- 40% of that figure is from DOE/SNL automobiles transiting KAFB
      - ---- Major source for criteria pollutants, but not Hazardous Air Pollutants

Kirtland Air Force Base Air Quality Status (Post BRAC Review Process)

- State Implementation Plan (SIP) with emission budget baseline approved on 13 March 1995
  - -- Emission budgets are the portions of the SIP's projected emissions inventory that describe the levels of emission growth for an area
  - -- SIP established 1993 emission levels as baseline
  - -- SIP emission budget does not provide growth specifically for KAFB
  - -- Emission budget is controlled by the AQCR to distribute between competing interests
    - --- KAFB, Sandia Lab, Philips Lab, Motorola, and other industrial facilities
- KAFB performed a generic conformity analysis in February 1995
  - -- Concluded KAFB has 20% growth potential for CO emissions over the next ten years
    - --- Conclusion based on MOBILE5a motor vehicle emission factors that predict a 25% reduction in emissions from motor vehicles will occur by 2005. Because motor vehicles contribute a majority of the CO emissions at KAFB, the 25% reduction in individual vehicle emissions outweighs the 20% increase in growth
      - ---- The claim of growth potential is solely based on the MOBILE5a modeling assumption that vehicle use decreases by 25% over the next ten years
      - ---- KAFB officials predict a growth in CO emissions, due to current operations, of 40 tons per year over 1994 levels
- Air emission control programs resulted in cleaner air and potential emission growth
  - -- Fuel enhancements, compressed natural gas vehicles, and voluntary no drive nights

(Capt Roop/CEVC/73360/3/16/95)

Base Realignment and Closure Air Quality Analysis Process

- KAFB questionnaire data concluded: Air Quality: YELLOW+
  - -- Attainment: YELLOW; Restriction: GREEN; Future Growth: YELLOW
- Air quality analysis procedures for proposed scenarios in nonattainment/maintenance areas
  - -- EPA currently has no conformity rule for attainment/unclassified areas
    - --- Therefore, no air quality analysis was performed for proposals in these areas
  - -- Analysis used the Air Conformity Applicability Model for emission calculations
    - --- Step 1: Are emissions from proposed BRAC action above de minimis threshold
      - ---- No: Conformity rule satisfied - are the emissions "regionally significant"
      - ---- Yes: Positive conformity must be demonstrated: Proceed to Step 3
    - --- Step 2: Are the emissions regionally significant: Regionally significant if potential emissions are 10 percent or more of an area's total emissions of a criteria pollutant
      - ---- No: Conformity rule satisfied - air quality should not hinder action
      - ---- Yes: Positive conformity must be demonstrated - Proceed to Step 3
    - --- Step 3: Assess probability of proposed action achieving a positive conformity analysis
      - ---- Compare 1990 emission baseline with net emissions from projected 1997 operations and BRAC action
        - ----- GREEN: Projected Emissions are Less Than or Equal to the 1990 Baseline
        - ----- YELLOW: Projected Emissions are Within Moderate Range of the 1990 Baseline
        - ----- RED: Projected Emissions are Significantly Greater Than the 1990 Baseline
- Brief BCEG on assessment of air quality issues associated with a proposed action

Results from Preliminary Conformity Analysis of BCEG Scenarios

- Add Scott Communications Center (635 Personnel)
  - -- Conformity Determination will be Required
  - -- Status YELLOW
    - --- BCEG Emissions are Within Moderate Range of the 1990 Baseline
- Add LA AFB with Norton AFB (2600 Personnel)
  - -- Conformity Determination will be Required
  - -- Status RED
    - --- BCEG Emissions are Significantly Greater Than 1990 Baseline

Document Separator

April 22, 1995

To: Frank Cantwell and Mark Pross, Air Force Team

From: Deirdre Nurre, Interagency Team

RE: Kirtland Air Force Base: Air Quality Concerns

The following memorandum addresses air quality concerns at Kirtland AFB. It reflects research completed and interviews conducted at KAFB on April 19, 1995 with Lt.Col. Scott Streifert of KAFB and Steven Walker, City of Albuquerque Environmental Health Department Air Pollution Control Division.

I. Issue:

- KAFB received a "yellow-plus" rating in the air quality category of Criterion II (Facilities Availability and Condition), because Albuquerque was in non-attainment for carbon monoxide (CO).

- The BCEG minutes of December 15, 1994 stated that the option of moving Los Angeles Air Force Base to Kirtland AFB "was not a viable option because of air quality conformity problems in Albuquerque." The community and congressional staff suspect that air quality is a significant reason why KAFB was slated for realignment.

II. Background:

- Air Force BCEG found that air quality and the potential need for conformity determinations for gaining bases was significant enough that air quality should be measured as part of Criterion 2. Areas that were in non-attainment for criteria pollutants were given a lower rating than those in attainment due to their lower probability of achieving a positive conformity analysis.

- "Conformity" refers to conformity of a federal action to a State Implementation Plan for air quality standards. Title V of the Clean Air Act requires a conformity determination when total emissions caused by a federal action for any given year of a project in a nonattainment or maintenance area exceed specified low-level annual thresholds for criteria pollutants including CO.

- The Albuquerque/Bernalillo County Air Quality Control Board approved State Implementation Plan documents in April which will redesignate the county from non-attainment to attainment with maintenance. The reclassification will exempt the county from some of the more difficult requirements of the conformity rule.

III. Findings:

- A conformity determination could be demonstrated if additional missions were sent to Kirtland in future. The base has already drafted a conformity determination for possible growth scenarios with the extensive assistance of the Air Pollution Control Division, City of Albuquerque.

- The Air Force's rating system was perceived by the community to evaluate local air quality too harshly. Although the Air Force's system gives air quality concerns significant weight, Air Force methods show no substantial deviations from DoD guidance.

IV. Recommendations:

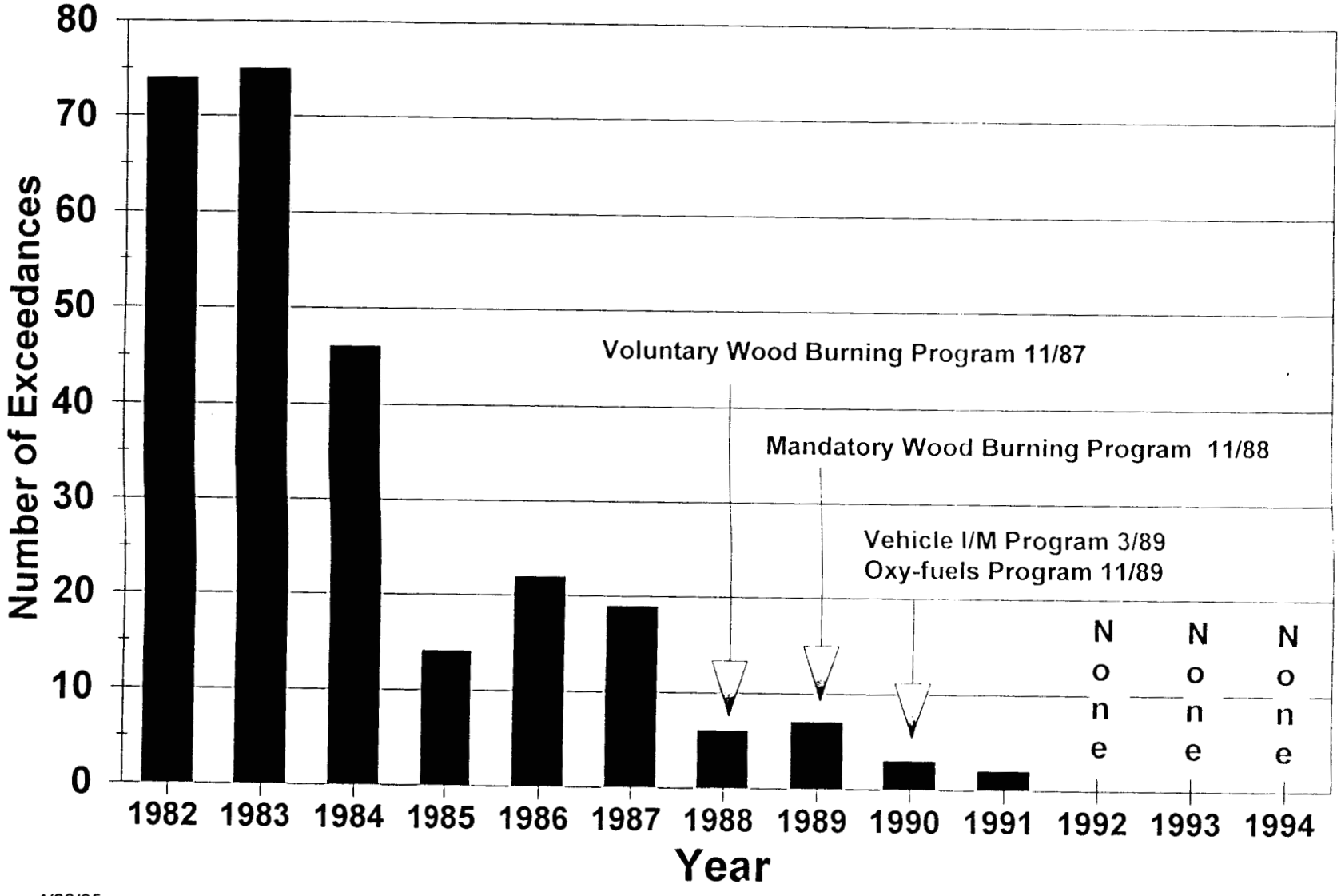
- Kirtland's air quality will not prevent the base from receiving additional missions.

- Discussions regarding KAFB realignment should focus on military value and cost considerations, not air quality.

Document Separator

Exceedances of the CO *NAAQS in Albuquerque, NM

1982 through 1993 for all sites - *NAAQS = National Ambient Air Quality Standard



Karl E. Peyton, 1/26/95
Albuquerque Environmental Health Department
Air Pollution Control Division

Document Separator

IMPORTANT PHONE NUMBERS

RONS:

Hyatt Regency Hotel
(505) 842-1234

La Posada Hotel
(505) 242-9090

Holiday Inn-Pyramid
(505) 828-0230

AIRLINES:

American	**(800) 433-7300**
Continental	**(800) 525-0280**
Delta	**(800) 221-1212**
Northwest	**(800) 225-2525**
TWA	**(800) 221-2000**
United	**(800) 241-6522**
USAir	**(800) 428-4322**

RENTAL CAR COMPANIES:

Avis	**(800) 331-1212**
Budget	**(800) 527-0700**
Dollar	**(800) 800-4000**
Hertz	**(800) 654-3131**
National	**(800) 328-4567**
Thrifty	**(800) 367-2277**

ALBUQUERQUE, NM
REGIONAL HEARING
APRIL 20, 1995

INFORMATION PACKET

Document Separator

4.19.95

DESA: What's impact on DESA for any reinvestment scenario?

Do lots of multi-media presentations - AI Core - Produced CD-ROM version
OSD organizations not service org. Not TOE.
We can

Chartered July '90 by Dep Sec Def.
Need for org -

Emphasize: fast reaction. 6-9 mo turnaround.

DESA: has very few test resources. We have limited range costs.

"Rocky Sands" - Scud missile exercise: - can we find & Scuds?
Kansas City Nat'l Guard

If DOE becomes landlord, will costs rise?
DOE typically uses contractors & run base.
We estimate 3-4 times higher support costs than if Kirtland were the main player.

It would impact 4
Transfer slots & DOE office, current
Ensure link of base exp. 2 enlisted 1 DOE living on base.

OSD is not subject to BRAC unlike AF

AFOTEC

HOSPITAL

Hospital: How would it be affected?
Ft Bliss is lead agent.
TriCare would handle all dependents & retirees.
will contract out, Then out the region, med care.
Champus
TriCare will dovetail with CHampus.
→ offers 3 options.
You sign up for diff levels of care.
Champus & will be handled by the lead agent.
Varies levels of eligibility -
Each vendor.
VA would compete to be a vendor under
Accessibility of MTF versus network providers.
Tricare prime: $440 + for retiree + spouse.

NO guidance for BRAC as far as minimum
what an AF population number drives?
There will be no fixed formula.
Price tag out as though you have no one
but active duty people.
Pursue reliability programs.
Onus is on the civilian workers themselves to come +
tell ~~people~~ hospital
A supervisory / managment issue that will be tough to
manage.

Patient decontamination team
& response team.
Response & monitoring capability
Not major impact > but, cost.
Make sure that environmental/safety team reviews at
A hospital & deal with.
Leave 10 bioenvironmental ~~[illegible]~~ engineers.
9 medics & 10 bioenvironmental
Phillips lab

Transfers come on & look at effect & med.
Major VA impact: By moved over some loss their costs.

Hospital provides cash & VA is hard
Affiliate major med & care — ~~this will be a~~
closure will create a reduced patient variety
½ of 6th floor is ours.
Co-located w/ radiology labs.
Co-direct & operate emergency room.
Co-locate & co-direct ER.
AF operated primary care clinic.
Move is a shared logistics.

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950414-17

FROM: BINGAMAN, JEFF	TO: DIXON
TITLE: SENATOR (NM)	TITLE: CHAIRMAN
ORGANIZATION: U. S. CONGRESS	ORGANIZATION: DBCRC

INSTALLATION (s) DISCUSSED: KIRTLAND

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR. CONGRESSIONAL LIAISON	✓		
DIR. COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
DEP FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR. INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA			
COMMISSIONER COX			
COMMISSIONER DAVIS			
COMMISSIONER KLING			
COMMISSIONER MONTOYA			
COMMISSIONER ROBLES			
COMMISSIONER STEELE			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER			
AIR FORCE TEAM LEADER	✓		
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING INFO CONCERNING THE AIR QUALITY SITUATION AT KIRTLAND AFB.

Date:	Routing Date: 950414	Date Originated: 950414	Mail Date:

Congress of the United States

Washington, DC 20515

Please refer to this number when responding 950414-V7

CONTACT: Agnes Oczon/Domenici
(202) 224-7073
Larry Smith/Bingaman
(202) 224-6385
Barry Bitzer/Schiff
(505) 766-2538

FOR IMMEDIATE RELEASE: Friday, April 14, 1995

EPA CONFIRMS DELEGATION CONTENTION: AIR QUALITY IN ALBUQUERQUE CAN ABSORB NEW KIRTLAND JOBS

WASHINGTON -- The regional office of the U.S. Environmental Protection Agency (EPA) has confirmed that the Air Force did not contact the EPA regarding the air quality situation at Kirtland Air Force Base and that there is "substantial room for growth" in Albuquerque.

Senators Pete Domenici and Jeff Bingaman and Congressman Steve Schiff have criticized the Air Force decision to use air quality as a reason for realigning Kirtland instead of Los Angeles Air Force Base.

"This information from the EPA reinforces our conclusion that it was faulty reasoning on the part of the Air Force to use Albuquerque's air quality as a critical factor in its decision not to expand Kirtland," the members of the delegation said. "The Air Force didn't even bother to query the EPA on Albuquerque's air quality before deciding last December that Kirtland was not suitable for expansion. This hasty and incorrect analysis by the Air Force clearly contributed to their later decision to realign Kirtland."

(more)

According to the Environmental Health Department, Albuquerque will soon be reclassified as being within the federal guidelines in all air quality categories. Senators Bingaman and Domenici and Congressman Schiff today also wrote to Carol Browner, the Administrator of the EPA, requesting that she expedite Governor Gary Johnson's application for final approval of Albuquerque's carbon monoxide implementation plan. Johnson submitted the application today to the EPA's Regional Office in Dallas.

###

COPY OF THE LETTER TO THE EPA ATTACHED

United States Senate

WASHINGTON, DC 20510

April 14, 1995

The Honorable Carol Browner
Administrator
Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

Dear Ms. Browner:

Today New Mexico's Governor, Gary E. Johnson, formally submitted to Jane Saginaw, the EPA Region VI Administrator, the State Implementation Plan (SIP) documents pertaining to carbon monoxide in Bernalillo County and requested final approval of the Albuquerque/Bernalillo County inspection/maintenance portion of the carbon monoxide SIP.

We write to ask that Governor Johnson's request be given expedited review by your regional office. As you know from previous correspondence, the Air Force has incorrectly and without consultation with your agency raised questions about whether Kirtland Air Force Base (KAFB) could receive significant numbers of additional personnel because of air quality concerns, specifically pertaining to carbon monoxide, in Albuquerque. Mr. Russell Rhoades of your Dallas office wrote Senator Bingaman April 6 that "it is our understanding that there is substantial room for growth and the City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit expansion of KAFB."

We understand that there has been very close cooperation between your regional office and the Albuquerque Environmental Health Department and New Mexico Environment Department in anticipation of Governor Johnson's submission. While expansion at KAFB can already be done under Albuquerque's current air quality status, we desire to absolutely eliminate any misconceptions on the part of the US Air Force. Therefore, we ask that the EPA review and approval sought by the Governor be carried out by May 15, and in any case no later than June 9. The reason for these dates is that by May 17, the Defense Base Closure and Realignment Commission (BRAC) must decide whether to add bases for realignment consideration and the last chance for Members of Congress to testify to the BRAC will come on June 12-13 with decisions made by July 1.

We believe that it is already clear that the Air Force erred in its environmental analysis in Albuquerque. Final EPA approval of the documents submitted today by Governor Johnson would make that absolutely clear.

Thank you for your consideration of our request.

Sincerely,

Pete V. Domenici
United States Senator

Jeff Bingaman
United States Senator

Steven Schiff
Member of Congress

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 06 1995

Honorable Jeff Bingaman
United States Senate
Washington, DC 20510-3102

Dear Senator Bingaman:

Thank you for your letter of March 15, 1995, concerning Kirtland Air Force Base (KAFB) located in Albuquerque, New Mexico. Specifically, you requested information on whether or not the Environmental Protection Agency (EPA) was consulted, during the course of the Air Force base closure and realignment analysis, regarding the impact to air quality of transferring additional personnel from other closed or realigned bases to KAFB in Albuquerque.

Our records indicated that the EPA Regional Office has not received any communication or document pertaining to the air quality impacts from KAFB or any other agency concerning increase in the staff or expansion at this base. In reference to Ms. Sarah Kotchian's letter of March 20, 1995, to you, it is our understanding that there is substantial room for growth and the City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit the expansion of KAFB.

I hope that the information above adequately covers your questions concerning the KAFB activities. If I can be of any assistance, please contact me.

Sincerely yours,

/s/ Russell F. Rhoades for

Jane N. Saginaw
Regional Administrator

cc: Ms. Sarah Kotchian
Environmental Health Department
Ms. Cecilia Williams
New Mexico Environment Department

OFFICE OF THE GOVERNOR
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

GARY E. JOHNSON
GOVERNOR

(505) 827-3000

April 14, 1995

Ms. Jane Saginaw, Regional Administrator
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Saginaw:

The City of Albuquerque and Bernalillo County have been working to improve air quality in the city and county since the 1970's. Carbon monoxide levels have decreased dramatically through the concerted efforts of the city's and county's citizens, the Albuquerque Department of Environmental Health and many others. Albuquerque has measured carbon monoxide levels for the last three winters which are below the federal ambient standard.

I respectfully request final approval of the attached Albuquerque/Bernalillo County inspection/maintenance(I/M) portion of the carbon monoxide State Implementation Plan (SIP). The SIP was adopted pursuant to the Clean Air Act Amendments of 1990 and 40 Code of Federal Regulations (CFR) Part 51.

The Albuquerque/Bernalillo County Air Quality Control Board approved these plans April 12, 1995 after public hearing as revisions to the New Mexico SIP. To facilitate your review and processing the following materials are enclosed:

1) I/M SIP hearing public record;
2) Federal Register 40 CFR Part 51;
3) NM Air Quality Control Act;
4) Air Quality Control Board Regulation 28, Motor Vehicle Inspection;
5) Transcript of August 1994 public hearing on Regulation 28 amendments;
6) City and County Motor Vehicle Emissions Control Ordinances;
7) City and County Joint Air Quality Control Board Ordinances;
8) City/County joint powers agreement;
9) MOU with State Motor Vehicle Division;
10) NM motor vehicle code, NMSA 66-3-1 through 66-3-28;
11) Vehicle Pollution Management Division (VPMD) Manual;
12) VPMD MIS plan;
13) VPMD public information plan;
14) VPMD training plan;
15) VPMD budget;
16) Vehicle exhaust gas analyzer (VEGAS) Bar 90 specifications;

17) Vehicle inspection report specifications; and
18) Mobile 5a modeling demonstration.

Enclosed with this letter are five copies of the materials listed above.

I look forward to continuing cooperation with your agency that is as successful as the professional coordination between the Albuquerque Environmental Health Department and the Environment Department. If you have any questions, please do not hesitate to contact Sarah B. Kotchian, Director of the Albuquerque Environmental Health Department at (505) 768-2600 or Mark E. Weidler, Secretary of the New Mexico Environment Department at (505) 827-2050.

Sincerely,

Gary E. Johnson
Governor
State of New Mexico

Enclosures

cc: Sarah B. Kotchian, Director, Albuquerque Environmental Health Department.
Mark E. Weidler, Secretary, NM Environment Department

OFFICE OF THE GOVERNOR
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

GARY E. JOHNSON
GOVERNOR

(505) 827-3000

April 14, 1995

Ms. Jane Saginaw, Regional Administrator
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Saginaw:

The City of Albuquerque and Bernalillo County have been working to improve air quality in the city and county since the 1970's. Carbon monoxide levels have decreased dramatically through the concerted efforts of the city's and county's citizens, the Albuquerque Department of Environmental Health and many others. Albuquerque has measured carbon monoxide levels for the last three winters which are below the federal ambient standard.

It is with great pleasure that I respectfully request approval of the attached State Implementation Plan (SIP) documents which are the supplement to the New Mexico SIP Pertaining to Attainment and Maintenance of the National Ambient Air Quality Standards (NAAQS) for Carbon Monoxide in Bernalillo County. The SIP was adopted pursuant to the Clean Air Act Amendments of 1990 and 40 Code of Federal Regulations (CFR) Part 51.

The Albuquerque/Bernalillo County Air Quality Control Board approved these plans on April 13, 1995 after a public hearing as amendments to the New Mexico SIP. To facilitate your review and processing the following materials are enclosed:

1) Completeness Checklist pursuant to 40 CFR 51 Appendix V;
2) SIP document;
3) Hearing record including exhibits;
4) 1993 CO Inventory for Bernalillo County;
5) Projected Inventories for 1996, 1999, 2002, 2005 and 2006;
6) The Board's regulations incorporated in the SIP; and,

AQCR No. 20, Authority-to-Construct Permits;
AQCR No. 38, Motor Vehicle Inspection;
AQCR No. 29, Prevention of Significant Deterioration;
AQCR No. 32, Construction Permits-Non-attainment Areas;
AQCR No. 34, Woodburning;
AQCR No. 35, Alternative Fuels;

AQCR No. 42, Transportation Conformity; and
AQCR No. 43, General Conformity.

7) 1992, 1993, and 1994 State and Local Air Monitoring Summary Reports (SLAMS).

Enclosed with this letter are five copies of the materials listed above for each SIP document.

I look forward to continuing cooperation with your agency that is as successful as the professional coordination between the Albuquerque Environmental Health Department and the Environment Department. If you have any questions, please do not hesitate to contact Sarah B. Kotchian, Director of the Albuquerque Environmental Health Department at (505) 768-2600 or Mark E. Weidler, Secretary of the New Mexico Environment Department at (505) 827-2850.

Sincerely,

Gary E. Johnson

Gary E. Johnson
Governor
State of New Mexico

Enclosures

cc: Sarah B. Kotchian, Director, Albuquerque Environmental Health Department
Mark E. Weidler, Secretary, NM Environment Department

United States Senate

WASHINGTON, DC 20510

April 13, 1995

General Thomas S. Moorman, Jr.
Vice Chief of Staff
United States Air Force
Room 4E936
The Pentagon
Washington, DC 20301

Dear General Moorman:

Thank you for providing us with a copy of your memo dated April 5, 1995 on the space test and experimentation consolidation at Kirtland Air Force Base.

We are, however, very disappointed with the contents of your memo to General Yates. Essentially you direct Air Force Materiel Command to proceed with the Los Angeles portion of the relocation (121 positions including contractors), to plan for the San Bernardino portion of the transfer beginning October 1, 1995 (57 positions including contractors), and to limit the Onizuka transfer (357 positions including contractors) to no more than 20 personnel pending the final results of the 1995 BRAC process. You also limit total military personnel in the space test and experimentation unit at Kirtland to 62 in anticipation of implementing the Air Force recommendation on realignment of Kirtland. You put off a final decision on whether the SMC/TE units at San Bernadino and Onizuka will be consolidated at Kirtland until resolution of the BRAC 95 recommendations.

In its December 8, 1994 report to the Secretary of the Air Force, Materiel Command concluded that:

> "The benefits of this consolidation, modernization, and relocation of SMC/CU (now SMC/TE) far outweigh the relatively small cost involved. The Air Force space mission will be strengthened; satellite control operating and maintenance costs will be reduced; customers will benefit from better support and lower costs; AFSPC will gain access to a spacecraft residual operations center; the AFSCN CCS upgrade efforts will benefit from lessons learned with actual on-line open architecture systems; the DOE will gain access to a worldwide satellite control system with minimal investment; and the DOD will preserve and strengthen the essence of its space and missile RDT&E assets. There can be no question that this is the right action to take -- and with downsizing and declining budgets ahead, this is the right time to take it!
>
> " Not just SMC, and not just AFMC, but the entire Air Force top management is committed to this forward looking

move which will strengthen its space capability while cutting costs!"

The only change since this report was written is the Air Force BRAC recommendation. As we understand it, the Base Closure Executive Group imposed an arbitrary 100-person limit on military personnel at Kirtland as part of the realignment proposal in order to insure that the support now provided to Kirtland tenants by the 377th Air Base Wing would no longer be necessary. That arbitrary limit now appears to be denying the Air Force the full benefits of space T&E consolidation which were so eloquently and enthusiastically described in the AFMC report cited above.

We obviously are fighting to reverse the Air Force realignment proposal for Kirtland before the Defense Base Closure and Realignment Commission. We hope to be successful. But in any case it makes no sense to delay the consolidation of SMC/TE, which would clearly reside in the Phillips Lab cantonment even under the Air Force proposal.

We understand that Phillips Laboratory and AFMC have already argued that the minimum number of military personnel remaining at Phillips under the Air Force proposal is 212. Your April 5 memo allows 62 more military personnel as part of SMC/TE. Obviously, the 100-military personnel limit is now moot. Accordingly, we see no reason not to proceed with the full SMC/TE consolidation, which would add another 97 military personnel under December 8 AFMC plan.

We therefore request that you reconsider your April 5 decision and that you direct that the full SMC/TE consolidation proceed as planned. In any case, we request that no action be taken by the Air Force that would preclude the full consolidation from taking place and the full benefits from being achieved as originally planned by AFMC.

Thank you for your consideration of our views.

Sincerely,

Jeff Bingaman
United States Senator

Pete V. Domenici
United States Senator

Steven Schiff
Member of Congress

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON DC 20330

5 APR 1995

MEMORANDUM FOR HQ AFMC/CC

FROM: HQ USAF/CV
1670 Air Force Pentagon
Washington, DC 20330-1670

SUBJECT: Space Test and Experimentation (SMC/CU) Consolidation at Kirtland AFB, NM (HQ USAF/CC 14 Mar 95 Memo, same subject)

1. Reference HQ USAF/CC letter placed the entire consolidation of the SMC/CU (now SMC/TE) on hold pending the final outcome of the 1995 BRAC process. After an on-site review at Kirtland, the following direction is provided:

a. Continue the relocation of the Los Angeles portion of SMC/TE to Kirtland. This unit, which is in transition, is unable to efficiently accomplish its mission. Reconstitution of this portion of the SMC/TE will ensure the vital operational support to the space and missile missions is continued.

b. Proceed with the planning for transfer (beginning 1 Oct 95) of all SMC/TEB Rocket Systems Launch Program Office (RSLP) military and civilian positions and personnel from San Bernardino (Norton AFB) CA to Kirtland AFB NM. This action will be accomplished in accordance with the Brown Amendment.

c. Minimize the transfer of SMC/TEO (Det 2, SMC) positions and personnel (to no more than 20) from Onizuka AS CA to Kirtland AFB NM pending final results of the BRAC 95 process. These personnel are required to maintain and operate already installed satellite command and control equipment at Kirtland AFB which will be required to prevent a break in mission capability associated with the transfer.

d. Delay any decision on where to locate SMC/TEO's deployable telemetry system and their associated support personnel from Onizuka AS CA pending results of the BRAC 95 process.

2. The Air Force will work to include SMC/TE as an organization that will remain at Kirtland AFB NM if the Secretary of Defense's recommendation on Kirtland AFB realignment is approved by the BRAC.

3. In anticipation of Kirtland AFB realignment under BRAC, SMC/TE will take no action which would preclude reaching an end state during the BRAC 95 implementation period of a maximum of 62 military personnel. A final decision on whether SMC/TE units at San Bernardino CA and Onizuka AS will be consolidated at Kirtland AFB will be provided after resolution of the BRAC 95 recommendations.

Thomas S. Moorman Jr.

THOMAS S. MOORMAN, Jr.
General, USAF
Vice Chief of Staff

cc:
HQ SMC/CC
SMC/TE
Phillips Lab Director
377 Wing/CC

EXCERPT FROM AFMC DEC 8, 1994 STUDY

IMPACT OF THE CONSOLIDATION ON MILITARY, CIVILIAN AND CONTRACTOR PERSONNEL

The consolidation and relocation of SMC/CU will affect a total of 535 positions (as of 14 July 1994) versus the 602 originally projected. Table 1 lists the breakdown of this total by both location and by type of position. Figure 9 illustrates the planned movement of these positions over the next 24 months. Figures 5–7 in the previous section illustrate the movement from individual bases.

TOTAL AFFECTED POSITIONS

Based on UMDs — 14 July 94
Total Positions Transferring from CA to NM

UNIT	MIL	CIV	AERO	CONTR	TOTAL
CU at LA	66	32	23	0	121
CUB at Norton	17	22	0	18	57
CUO at Onizuka	76	36	6	239	357
TOTAL	159	90	29	257	535

Table 1 — Total Affected Positions

An Environmental Assessment, completed in January 1994 (see Appendix B), concluded there would be no significant socioeconomic impacts resulting from the proposed relocation. The total numbers of jobs affected in the Los Angeles and San Franciso metropolitan areas are insignificant compared to the overall work force in those areas. The loss of jobs in the San Bernardino area are also insignificant but have been precipitated by the BRAC closure of Norton AFB.

As seen above, a total of only 159 military positions will be affected by the relocation. The relocation is not considered a "unit move" and therefore incumbents will not be automatically reassigned with their slots. Because the transition is spread over a two-year period, most of the personnel filling these positions will move to new assignments via the normal military reassignment process (PCS/PCA) rather than relocate to KAFB. Most military positions will be transferred to KAFB empty. The vacant slots will then be filled at KAFB by new incoming officers via

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

13 APR 1995

HQ USAF/RT
1670 Air Force Pentagon
Washington DC 20330-1670

The Honorable Jeff Bingaman
United States Senate
Washington, DC 20510

Dear Senator Bingaman

This letter responds to your letter of April 11, 1995, regarding Kirtland Air Force Base, New Mexico, and your request for the refined cost elements resulting from the site survey. I understand your concern, and desire to have the latest available data in preparation for the Commission hearing. Unfortunately, we remain unable to comply with your request. You have expressed concern over a process that would be unreliable because of inaccuracy and the haste of its completion. Our validation and certification process is designed to avoid these problems.

As you know, we met for the past two days with Kirtland Officials, including agencies such as the Department of Energy (DOE) to obtain their detailed cost information. We will continue our process, validate the estimates at the Major Command level, and present those refinements to the Base Closure Executive Group for approval. We are working as rapidly as we can and will provide this information to you as soon as possible. We are committed to an open process, but are equally committed to a process that properly develops accurate information prior to its release.

A similar letter is being provided to Senator Domenici and Representative Schiff.

Sincerely

Jay D. Blume

JAY D. BLUME, Jr.
Major General, USAF
Special Assistant to the Chief of Staff
for Base Realignment and Transition

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC 20330-1000

April 13, 1995

OFFICE OF THE SECRETARY

SAF/LLP
1160 Air Force Pentagon
Washington, DC 20330-1160

The Honorable Jeff Bingaman
United States Senate
Washington, DC 20510

Dear Senator Bingaman

This is in response to your joint letter of April 3, 1995, to the Secretary of the Air Force concerning Kirtland Air Force Base (AFB), New Mexico. Specifically, you requested additional information concerning the methodology used to determine whether tenants are relocated to other installations. The following responses are provided per your request.

QUESTION: Does the Air Force use below 100 active duty personnel as a guideline for reducing active duty support functions? Is there written policy or guidelines? If so, please provide us copies of relevant documents.

RESPONSE: No known policy exists, either formally or informally. The specific requirement was that the remaining active duty personnel were to be capable of operating with minimal support. The Base Closure Executive Group's (BCEG) collective judgment was that if remaining active duty personnel were around 100, this would be compatible with the strategy.

QUESTION: Does DoD have guidelines on the number of active duty personnel that are required on an installation or in a facility to justify normal active duty support functions? If so, please provide us copies of relevant documents.

RESPONSE: No known policy exists, formally or informally.

QUESTION: Explain the Air Force's use of baseline populations and adjusted populations. Given the Air Force's projected end-strength numbers for future years, has the Air Force applied a standard population reduction across the board (all bases, tenants, mission, etc.)? If so, why? Are the reductions the same for officers, enlisted, and civilians? If so, why?

RESPONSE: The Air Force used the Fiscal Year (FY) 1994 position of the August 1994 base manpower file to set a baseline population for each installation meeting the BRAC threshold. However, there invariably are manning changes programmed to occur at any base over time. The Air Force reviewed each individual installation and adjusted the "baseline" officer, enlisted, and civilian populations based on specific program changes incorporated in the Future Year Defense Program but not yet reflected in the base manpower files. The adjustments made were unique to each base; there was no across the board judgment factor. This resulting "adjusted" population was used as the basis for determining manpower moves and savings in the COBRA analysis. The result was the best available projection for fourth quarter, FY 1997.

QUESTION: What space and facilities were identified at Kelly AFB to be used to beddown the Air Force Inspection Agency and Air Force Safety Center (AFSC) and DNA? Are these facilities and space currently occupied by depot functions? Will these facilities be made available by "depot downsizing in-place?

RESPONSE: The Air Force Inspection Agency (AFIA) and Air Force Safety Agency (AFSA) military construction (MILCON) estimates in the recommendation COBRA along with Defense Nuclear Agency Field Command (DNAFC) were placed in multiple available facilities. Originally, Kelly AFB identified 70,000 square feet of administrative space available for DNAFC after completion of the Weapon Systems Support Center in December 1996. Kelly AFB also identified Buildings 43, 323, 1500 and 1562 with a total of 109,076 square feet of administrative space as being available for inbound activities, such as AFIA and AFSA. The 40,905 square feet space requirements for AFIA and AFSC were applied against the available administrative space at Kelly AFB. Facilities were to be made available after completion of the Weapon Systems Support Center in December 1996 rather than "depot downsizing".

QUESTION: What was the Air Force's beddown plan for these Kirtland tenants when Kelly AFB was a closure candidate? Will you suggest to the Commission that they use your alternate Kirtland plans if Kelly's depot is added to the Commission's list and endorsed for closure?

RESPONSE: No set alternative Air Force beddown plan exists. If Kelly AFB was a closure candidate, we would have revisited the Air Force's beddown plan for the Kirtland AFB realignment.

QUESTION: Since the cost savings that the USAF is claiming are due to personnel eliminations, should we expect the USAF active duty end-strength to show a reduction from 381,900 personnel to 277,100 in FY 2001 to reflect the actualization of the BRAC reported cost savings?

RESPONSE: We are unable to track to the specific end-strength numbers raised in the question. However, the basic premise of the question is valid. Air Force active duty strength will be reduced as a result of implementing BRAC actions. Specifically, with regard to Kirtland AFB, the Air Force proposal identified an active duty manpower savings of 922 active duty positions which will be reduced from overall Air Force end-strength. Other active duty positions move within their missions to their new locations. On the civilian side, the BRAC savings will be used to programmatically define the National Performance Review civilian reductions already levied against the Air Force.

QUESTION: Would you agree that the USAF can follow only one of two options: Claim the recurring savings and reduce the end-strength by 4800; or do not reduce the end-strength by 4800 and do not claim the recurring savings.

RESPONSE: We are unable to track to the specific 4800 end-strength number raised in the question. However, the basic premise of the question is valid; Air Force active duty strength will be reduced as a result of implementing BRAC actions. On the civilian side, the BRAC savings will be used to programmatically define the National Performance Review civilian reductions already levied against the Air Force. Recurring savings are linked to personnel eliminations in the COBRA. The Kirtland AFB realignment recommendation COBRA had 1375 personnel eliminations with a recurring savings of $52.1 million.

We trust this information is useful. A similar letter is being provided to Senator Domenici and Representative Schiff.

Sincerely

STEPHEN D. BULL, III
Colonel, USAF
Chief, Programs and Legislation Division
Office of Legislative Liaison

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950413-7

FROM: DOMENICI, PETE	TO: DIXON
SENATOR, (NM)	TITLE: CHAIRMAN
ORGANIZATION: U. S. CONGRESS	ORGANIZATION: DBCRC
INSTALLATION s) DISCUSSED: KIRTLAND	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL	✓			COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR. CONGRESSIONAL LIAISON	✓			COMMISSIONER STEELE			
DIR. COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EX[redacted]VE SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION	✓			AIR FORCE TEAM LEADER	✓		
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL	✓			CROSS SERVICE TEAM LEADER			
				DN	✓		
DIR. INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING COPY OF PRELIMINARY IT INERARY FOR THE DBCRC'S SITE VISIT TO KIRTLAND ON APRIL 18.

[redacted]

ue Date:	Routing Date: 950413	Date Originated: 950410	Mail Date:

Document Separator

United States Senate

WASHINGTON, DC 20510

[redacted]
950413-7

April 10, 1995

The Honorable Alan Dixon
Chairman Base Closure and Realignment Commission
1700 North Moore Street Suite 1425
Arlington, VA 22209

Dear Mr. Chairman:

The enclosed letter was sent by the delegation to Brigadier General Carlos Perez of Kirtland Air Force Base to assist in the itinerary development for the April 18 Base Closure and Realignment Commission site visit. The itinerary is only preliminary and we encourage you to make any additions you deem necessary.

Sincerely,

Pete V. Domenici
United States Senator

Jeff Bingaman
United States Senator

Enclosure

United States Senate

WASHINGTON, DC 20510

April 7, 1995

Brigadier General Carlos Perez
Commander, 377th Air Base Wing
Kirtland AFB, NM

Dear General Perez:

In order to facilitate the site visit at Kirtland AFB planned for April 18, we are recommending the enclosed itinerary which we have developed with the Kirtland Retention Task Force.

We believe that this itinerary will give the visiting Commissioners a sense of the size of the base, the complexity of the research, testing and operational training carried out at the base by the Departments of Defense and Energy, the security requirements for these activities. The site visit should also emphasize the minimal existing facilities and limited acreage that will be available for reuse.

We are also forwarding this itinerary to the Base Closure and Realignment Commission for their input.

Sincerely,

Pete V. Domenici
United States Senator

Jeff Bingaman
United States Senator

Enclosure

PROPOSED ITINERARY
KIRTLAND AFB SITE VISIT
APRIL 18, 1995

INITIAL BRIEFING

A) 377th briefing on Kirtland AFB and its tenants as currently configured.

B) 377th briefing on proposed cantonment areas for DoE, Phillips Laboratory, 898th Munitions Squadron, and 150th Fighter Group ANG. Emphasize re-use areas limited to family housing, some dormitories, commissary and EX buildings.

C) DoE/Sandia presentation of requirements for safety/buffer zones and security under Air Force realignment proposal. DoE presentation of additional costs to DoE and of concerns regarding implications of AF plan for DoE operations.

D) Phillips Lab presentation of minimum required military presence at laboratory.

E) Defense Nuclear Agency presentation of impact of leaving Kirtland to its mission.

TOUR

1. Tour Kirtland Underground Munitions Storage Center (KUMSC). Briefing on 898th mission and security requirements.

2. Drive Inhalation Toxicology Research Institute and nearby auxiliary fields; mention mission.

3. Visit Starfire Optical Range/mission briefing.

4. Coyote Canyon, including cable facility and Central Training Academy.

5. Drive by Manzano Mountain Storage Complex and through Sandia National Laboratory tech area IV.

6. Tour 58th Special Operations Wing, special emphasis on training simulators and mission briefing and cost estimate to move.

7. Conclude tour at DoE Albuquerque operations for a round table discussion with heads of key tenant organizations.

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Record of notes with
meeting of air quality
reps + KAFB
4/19/95

Compliance costs:

Streiffert meeting: what will be total environmental shop,
then & now?
what are your compliance costs for permitting?

Mixed waste: A scope of the problem:

FY 1990 & 1995: Lots of change over that period.

Conformity analysis: not
pulling conformity analysis - when did it come from?
what's our growth potential?

All air analysis was done pre-BRAC.
Do you permit to baseline? Actual?

~~Not - growth scenario~~

3/20/95 - lays out growth scenarios - what growth can
you handle + 5 + 10,000 people.

Albequerque
Pass their own SIPs - acts as its own state for air quality
City & County - purposes. They were out ahead of
the rest of New Mexico.

Title V permit - DoD & DOE will each have their own.
who will be responsible for their own permit. Both parts of
the base responsible in some respects as their own local entity.

Lease

Non attainment for CO since 25-30 years - have had.
I & M programs & other programs
& lots of proactive environmental problems.

Assumes
1½% growth - over the next few years.
Point sources are 5% of the problem. The rest: mobile.

Bernalillo county - is the county of the air district - and the CO non attainment area.
Bernalillo county air district.

3 clean years - move to maintenance.
10 years maint → 7th or 8th year petition for another 10 years.

Applicants of Title V permits
Conform: gen of transp.

Low-mod non attainment - (→ 9.0 of what?) → I don't get it.
now the standard is 9.0 - design value. 7.6 or 8, is what this district has.
One SIP with many subelements -
need sub elements for parts of the SIP.
SIP is supplemented & modified.
CO →
control.
New SIP: ✓1993 emissions survey date. (More current.)
✓ Survey date due.
1990 inventory is the right inventory?

Emissions Model 4 & Model 5.
Model 5 gives a higher emission factor - accounts for deterioration of emission controls - model 5 is a higher number. accounts for fleet turnover & ↑ fuel efficiency.
Mobile 5 raises the baseline
Mobile 4 & 5 are 2 very different methods.

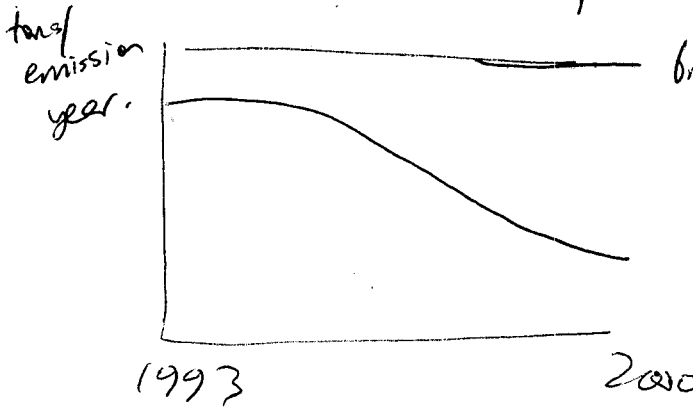
Mobile 4 has been superceded.
93 inventory -
~~Ozone not yet met~~

If you're going to use 1990, you need to ~~use~~ normalize it using a Mobile 5. An upper & lower bound to use 1990 data & Mobile 5.
New analysis was made using 1993 data & a Mobile 5 program.

CRITICAL to look at IMPLEMENTATION YEAR:
attainment request: when you submit, you:
- prove date
- prove enforceable mitigation ~~requirements~~ techniques
- meet legal obligations of attainment/maintenance monitoring area.

~~The~~ 1½% per year. Growth:
assume 50,000 jobs/year. Got statistics from the local business
growth: can accommodate 50,000 jobs.

Headroom ~~[illegible]~~ tons per day below the 1993 total.



80% rule effectiveness calculated this program
Compliance in ~~effort~~
Provide EPA with analysis -
Do
Ozone PM_{10} -

CO is easier to deal with than ~~ozone~~ - Esp. at an AF base.

we haven't brought in the aircraft into the conformity analysis, -
but it would be done. A

Although airport traffic hasn't been a problem
Aircraft are 2% of total ~~emissions~~ inventory.

~~Perhaps~~

2 kinds of conformity analysis -
one is a higher hurdle - the hurdle about trying to help
a region ratchet down to SIP levels.

E.g.: 400 tons - not causing or contributing to
an a.q. violation
CO - if it won't show

It would be easy for base to stop wood burning fireplaces.

CO is just an easier hurdle to deal with.

Q: In this case, all the hoopla is over is
the "Cause or Contribute to" hurdle.

AF don't have to worry about ~~the~~ soil; the air quality can't trouble.

~~the~~ 20 years in maintenance plan—

Expansion will NOT ~~impede~~ wreck maintenance ~~and~~ cause big uniformity standard

clean issues:
Soils ~~issues~~ contamination.

windblown sites: spread Barium oxide sites.
Provide zone of concentration from wind cause nuclear reaction sites.
Herbicides: to keep vegetation down.

low-level rad sites: a group of sites under Rev-10.
old aircraft: contains low level rad.
Manzano Base: lots of

Unrestricted use:
Exceedance is based on an exposure limit: a clean limit.
Action level is based on counts/gram.
AMC
AFMC } long cut a cos
All sites are still in the investigation phase.

~300 IRP sites - (- guess) but only 70 odd on a RIRP site list.

Document Separator

58th SPECIAL OPERATIONS WING

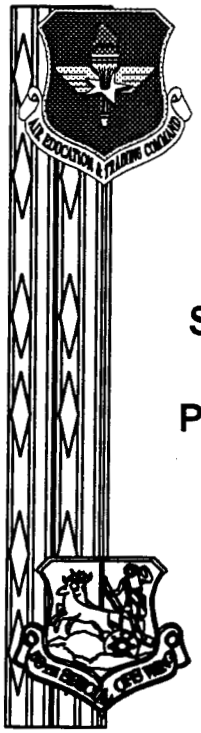
BRAC COMMISION BRIEF

18 April 95

Colonel Bob Pyeatt
Vice Commander

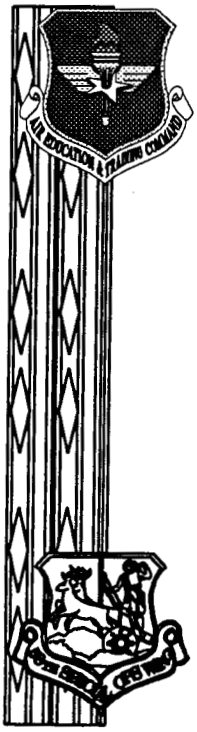
WHAT WE'LL TALK ABOUT

- Mission
- Resources
- Training



Mission

To Train
Mission-Ready
Special Operations & Combat Rescue
Aircrews, Maintenance Personnel,
Pararescuemen and Combat Controllers
for the
World's Best
Air Force



STATUS

For Our Customers, We Train:

More Personnel in
More Crew Positions in
More Aircraft than

Any Other Schoolhouse in AETC

PERSONNEL

	AUTHORIZED				ASSIGNED
	STAFF	OG	LG	TOTAL	PERM
OFFICERS					
FLYING	7	136	0	143	136
NONFLYING	2	15	8	25	26
(TOTAL)	9	151	8	168	162
ENLISTED					
FLYING	0	172	0	172	174
NONFLYING	35	510	326	871	936
(TOTAL)	35	682	326	1,043	1,110
CIVILIANS	5	40	39	84	66
TOTAL	49	873	373	1,295	1,338

TOTAL POPULATION ASSIGNED: 1,338

As of 17 April 1995

ATD CONTRACTOR SUPPORT

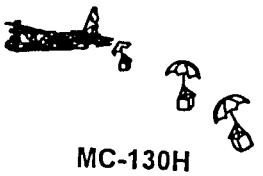
MARTIN MARIETTA

MH-53J, TH-53A
M/HH-60G
120

CAE-LINK

HC-130P
43

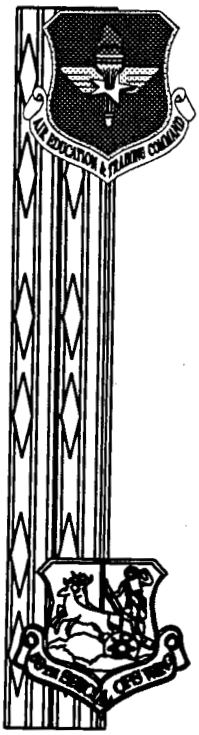
LORAL



MC-130H
31

194

LORAL ADDS 52 PERSONNEL TO SUPPORT
MC-130H WST IN FY95/96

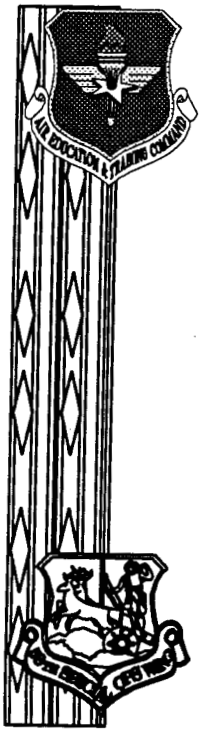


FORMAL SCHOOL COURSES

AIRCRAFT TYPE	CREW POSITIONS OFFICER	ENLISTED	COURSES
H-1	1	1	7
H-53	1	2	8
H-60	1	1	6
HC-130	2	3	12
MC-130H	3	2	6
PJs	0	1	8
CCT			2
FORT RUCKER			1
REFRESHER			9
MISC			3
TOTAL	8	10	62

As of 17 April 1995

96-97 - Navy will be joining ft Rucker → Kirtland training.

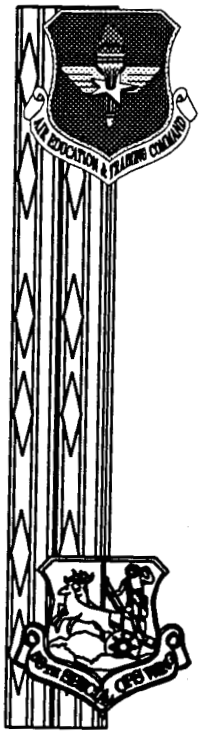


FORMAL SCHOOL STUDENTS

TYPE	FY 94 STUDENTS GRADS	FY 95 STUDENTS** PROG	PROG NOW	GRADS NOW
H-1	47	84	49	43
H-53	74	102	40	35
H-60	80	112	49	41
HC-130	129	165	78	72
MC-130H	75	72	32	26
PJs	60	308	99	58
CCT	92	95	36	35
FORT RUCKER	72	90	30	27
MISC	91	165	70	39
TOTAL	720	1,193	483	376

As of 7 April 1995

PAA Primary aircraft authorized
BAA Backup aircraft authorized.

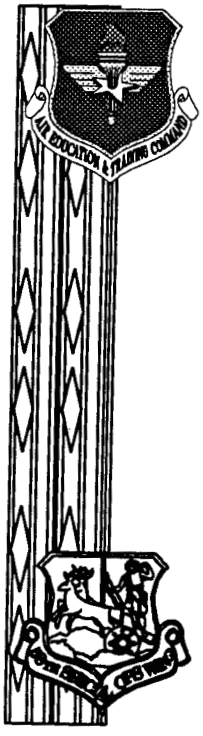


AIRCRAFT

TYPE	ASSIGNED (HEADQUARTERS ALLOCATION)	POSSESSED (PHYSICALLY RESPONSIBLE)	DEPOT/ OTHER
UH-1N	6	5	1/0
TH-53A	6	5	1/0
MH-53J*	4	3	2/0
HH-60G*	7	7	1/0
HC-130P	5	4	1/0
MC-130H	5	5	0/0
HC-130N	1	1	0/0
TOTAL	34	30	6/0

* 2 Loaner aircraft
HH-60G, 1; MH-53J, 1

As of 7 April 1995



FLYING HOUR PROGRAM

AIRCRAFT	FY94 FLOWN	FY 95 PROG	FY 95 FLOWN
UH-1N	2,256	2,304	1,211.0
TH-53A	1,104	1,632	760.2
MH-53J	1,968	1,728	808.8
HH-60G	3,540	3,420	1,500.5
HC-130P	2,520	2,580	1,296.6
MC-130H	2,016	2,112	1,010.8
TOTAL	13,404	13,776	6,587.9

As of 7 April 1995

LOCAL TRAINING AREAS

REQUIREMENTS	AVAILABILITY
HELO AUX FIELD (FIRE STATION)	1
DIRT & PAVED STRIPS & PADS	12
TREE JUMP AREA	0
WATER TRAINING AREA (CONFINED/OPEN)	1/0
GUNNERY RANGES	3
ELECTRONIC WARFARE RANGE	2
DROP ZONE (PERSONNEL & EQUIPMENT)	3
C-130 ASSAULT LANDING STRIPS (NORMAL/NVG)	3/2
PARARESCUE GROUND TRAINING AREAS	4
LOW-LEVEL FLYING AREAS	32,000 SQ MI
REMOTE LANDING SITES	38
MOUNTAIN TRAINING AREAS	3
AIR REFUELING TRACKS	1 HIGH; 3 LOW
WEAPONS RANGES	4

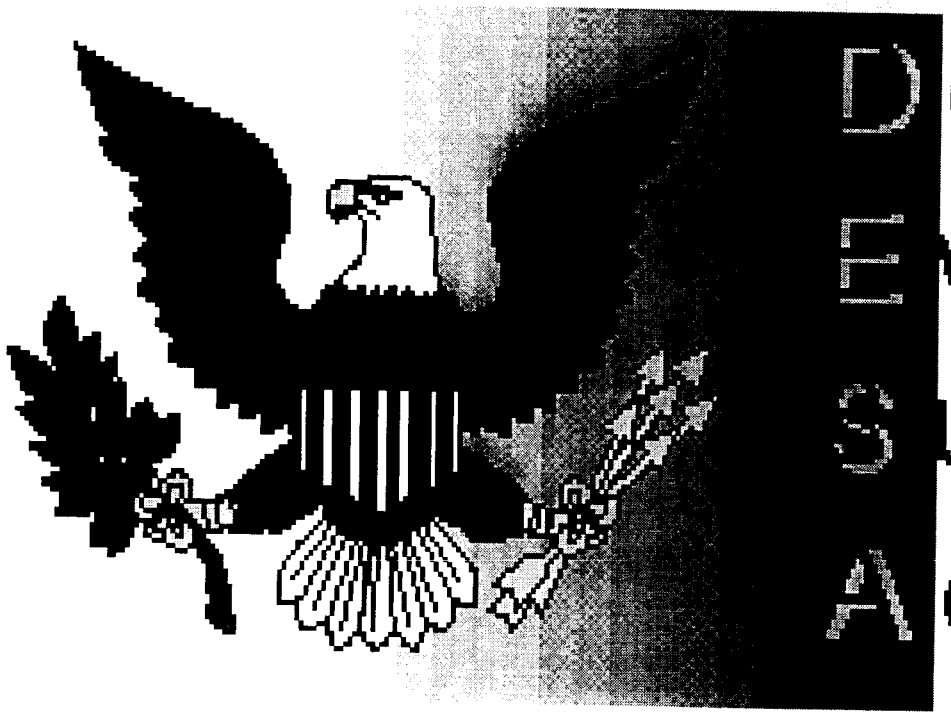
- Do 50% of this flying at night. At Hollaman, they need have driven roads crazy.
- German airfare will move in '99.
- They need to have this facilities colocated with

QUESTIONS

- quality of water is a concern: making out?
- Degredation of training? No, because we'll get new facilities. $245 mil. to put in the new facility at Hollaman
- 8000 sq. mi. V diminished by falcons & another endangered species.

- Environ- They're not going to need helicopter landing sites w/o an EA or maybe an EIS.
- Until simulator is operational, the troops are going to have to come back here
+ $40M in costs other than Milcon.

Document Separator



Defense
Evaluation
Support
Activity

Defense
Evaluation
Support
Activity

OVERVIEW

- Mission
- Capabilities
- Customer Base
- Personnel and Facilities

Defense Evaluation Support Activity

DESA

Origins

- DEPSECDEF chartered resource to provide support to unserved clientele
- DoD and other government departments need for solutions to today's problems

Mission

Provide "planning, evaluation and test support to Defense wide activities of the USD (A)"

"Maintain direct communication with DoD and other government agencies to identify requirements and coordinate use of the DESA evaluation capabilities."

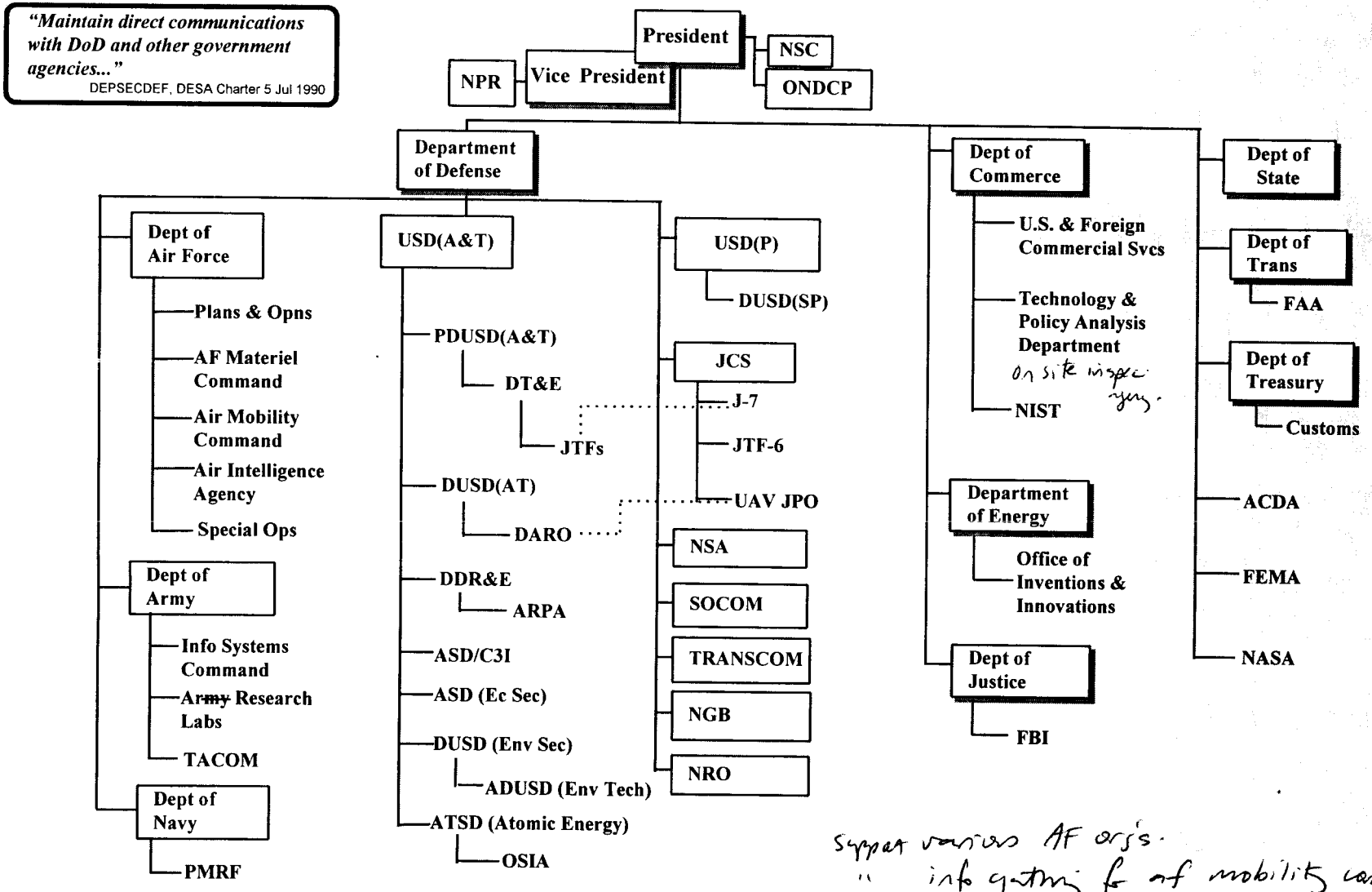
Character

- Experienced people
- Successful track record = Reliability
- Effective integrators and facilitators
- Nonparochial - objective

Defense Evaluation Support Activity

DESA's Diverse Business Base

"Maintain direct communications with DoD and other government agencies..."
DEPSECDEF, DESA Charter 5 Jul 1990

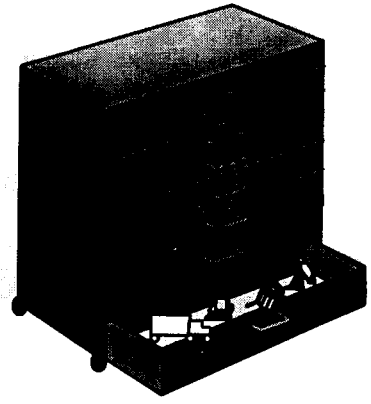


Support various AF org's.
" info getting to AF mobility command
can they get info in/out to the field? etc.

Defense Evaluation Support Activity

Capabilities

DESA is a pretty self-sufficient function. Least impact for any



Finance
Contracting
Small Purchase
Leasing

Operations Security
Administrative Security
Risk Management

Program Management
Systems Engineering
Applications Engineering
Operations & Operations Support

Personnel
Legal
Environmental

Property Control
Transportation
Supply
Facilities

Charter to do joint tests

DESA has a good counsel - (part of the solution)

Environmental: a service that DESA started out ~~doing~~ to evaluate their own ~~reports~~ actions; now they deliver ~~doing~~ this service to other people.

Defense Evaluation Support Activity

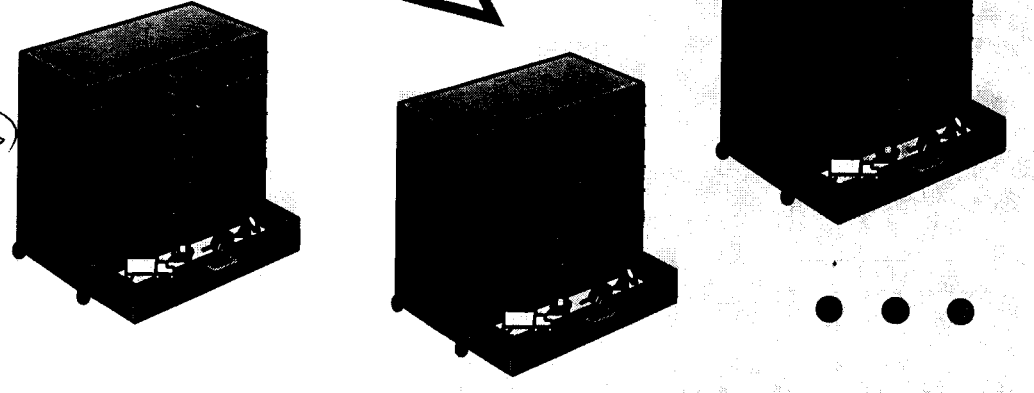
DESA Provides Tailored Solutions

Requirements
- Client Mission
- Client Objectives

- Head Of Contracting
- Direct Lease
- Transportation Control Office
- General Counsel
- Telecommunications Control Group
- Project EIS
- COMSEC Account

- Airspace Management — DESA can fly certain airspace.
- Operations Vans
- Instrumentation Vans
- Communications Systems
- UAVs Unmanned Air vehicles: • warfare • drug busts (no manned airplanes) • border protection
- Multimedia Production
- SYSCON 2000
- Technology Applications Center

TAILOR

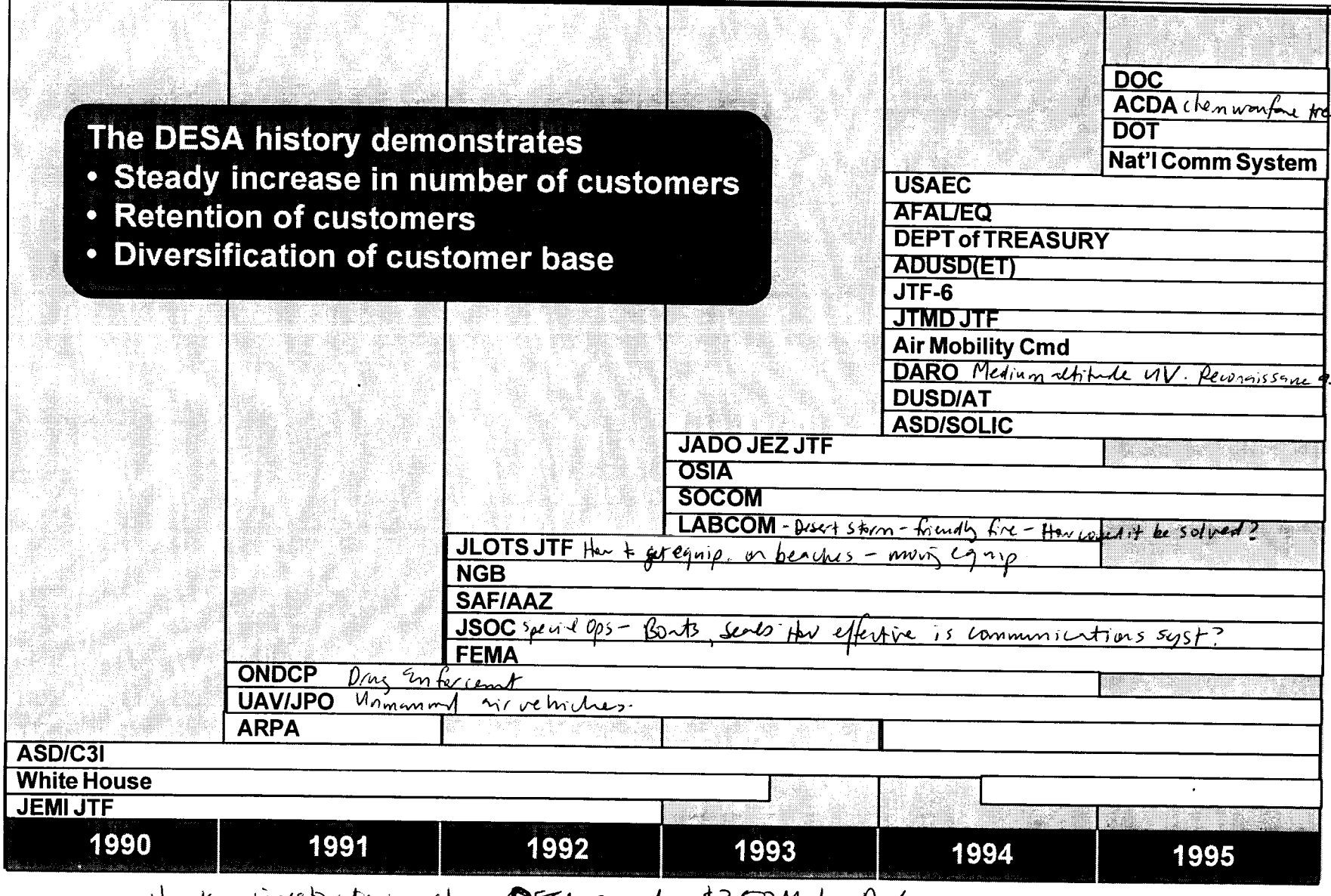


Capabilities Tailored to Client Needs

Defense Evaluation Support Activity

Historical Business Perspective

The DESA history demonstrates
- **Steady increase in number of customers**
- **Retention of customers**
- **Diversification of customer base**

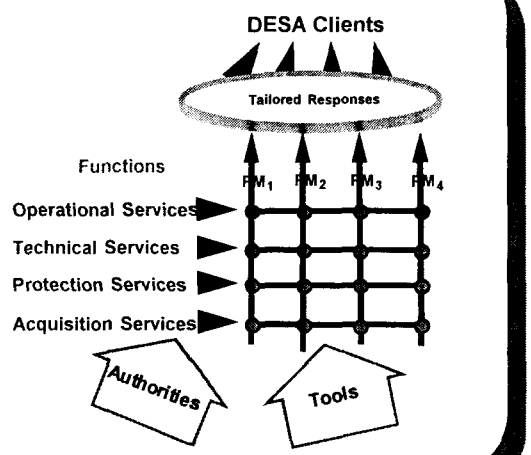


Task investigation: ~~Show~~ DESA saved $250M to Defense.

Defense
Evaluation
Support
Activity

DESA's Bottom Line

Our Approach Works ...



... For Unique Needs In Many Business Areas ...

Advanced Concepts Programs
Environmental Programs
Joint Test & Evaluation Programs
National Guard Bureau & State Programs
Special Operations Programs
Technology Demonstration Programs
Unmanned Vehicle Programs

... As Required by Our Mission and its Origins

Responds to the needs of "warfighters" across government
Provides flexible, full-function support for today's scenarios
Adds value by transferring experience and lessons learned
Applies technology now to ensure economic response today

Defense Evaluation Support Activity

Why Kirtland AFB ?

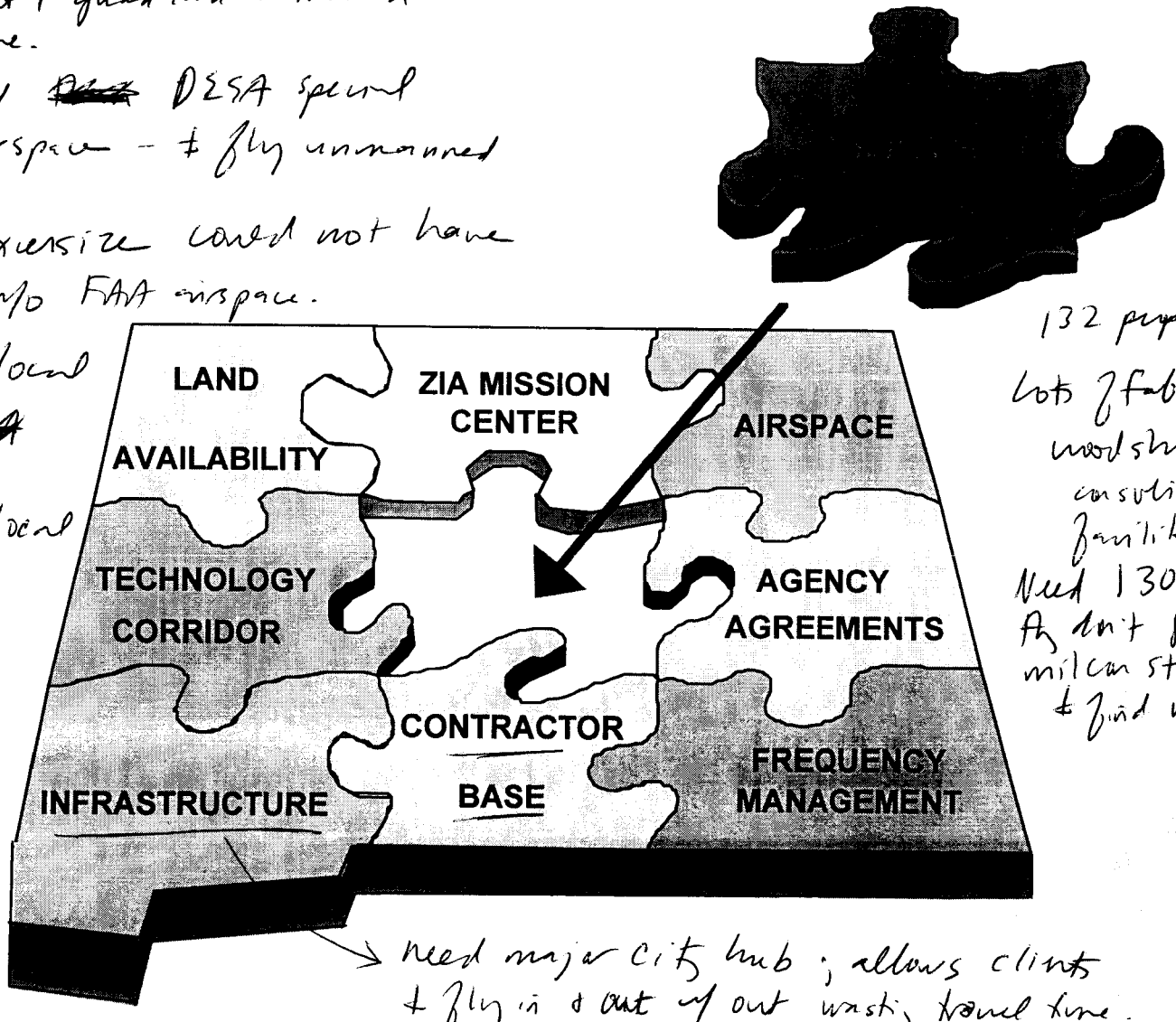
why not Eglad or whatever?
we can use nat'l guard land + Indian reservations here.

FAA has allowed ~~[redacted]~~ DESA special activity airspace - to fly unmanned aircraft.

Roving sands exercise could not have been done w/o FAA airspace.

Relationships w/ local security ~~[redacted]~~ police.

Relationship w/ a local university.



132 people (100 are civ)

Lots of fabrication shops, woodshops, etc. Intent: consolidate into 1 facility.

Need 130-150 sq. ft; if fly don't get to planned mil con stuff fly'll have to find new space.

Federal
State
Local
? ...

need major city hub; allows clints to fly in & out of out wasting travel time. Need to be near contractors.

Closure of Ellsworth
Closure of Grand Forks missile field only.
Closure of Minot, moving B-52s to Beale as an alternative to closure of Grand Forks missile field
Closure of Malmstrom airfield only

Following the summary of the SECAF meeting, Maj Niezgoda, AF/SCXX, briefed a redirect of the 485th EIG from Hill AFB to Tinker AFB, using the slides at Atch 1. Mr. Boatright reminded the BCEG that a redirect must contain two primary elements to be a strong candidate for SECDEF and Commission approval. First, it needs to reflect what has changed since the previous Commission decision. Second, the resulting redirect needs to be a more cost effective option. He also noted that, prior to the 1993 Commission issuing its recommendation, the Commission had been informed that the Air Force had a more cost effective option for realigning the 485th EIG to Tinker AFB. Despite the Air Force recommendation, the Commission directed the unit to Hill AFB. The BCEG noted that additional cost figures would be required to determine if this redirect is cost effective.

Mr. Beach, SAF/FM, presented a briefing on the costs of previous BRAC rounds, using the slides at Atch 2, as general background information for the BCEG members. A considerable discussion followed concerning obligation rates, funding for environmental restoration, and the proposal of transferring DoD DERA account funds to BRAC

Maj Richardson, AF/RTR, briefed AFRES closure and realignment proposals, using the slides at Atch 3. The BCEG asked that BCWG provide oversight over the cost estimation portion of the COBRA inputs. When reviewing the March AFB recommendation, the BCEG noted that this base is the primary airlift site for the Marines stationed in Southern California. The BCEG questioned the steady state savings on Grissom. In examining the Bergstrom proposal, the BCEG noted that the MacDill cost factor should not include operation of the airfield, since the Air Force will be obligated to provide this as a result of a previous decision by the Deputy Secretary of Defense.

When reviewing the analysis of the Reserve C-130 bases, the BCEG questioned the force structure on which the analysis was predicated. They asked for an update on the force structure for C-130 bases.

Mr. Mleziva, AF/BCWG, presented a preliminary look at the briefing to be given to the SECAF regarding lab and product center activities, using the slides at Atch 4. He noted the difference in the Rome Lab, New York, figures from the level playing field. There were several contributing factors. First, more refined requirements were used for pricing a move to Hanscom AFB. Second, available space at Hanscom was discovered that could be renovated and converted to lab space. Third, more refined personnel data was used.

For consideration of the Mesa Armstrong Lab activity, the BCEG noted that the support at Orlando should be assumed to be identical to the support required at the current location, so there should be no saving from that portion of the COBRA analysis. Mr. Mleziva pointed out that the level-playing field analysis for Los Angeles AFB, in which

Kirtland was used as a receiver, was not a viable option because of air quality conformity problems in Albuquerque. The BCEG directed the BCWG to work the remaining cost estimates for the focused COBRA analysis of Los Angeles, Kirtland, and Brooks AFBs, since the information provided was based on level-playing field only.

There being no further matters to discuss, the meeting was adjourned at 1405. The next BCEG meeting will be at the call of the Co-Chairmen.

OPEN ITEMS: Squadron size and number of units White Paper
AFRES C-130 force structure
Verification of AFRES cost figures

JAY D. BLUME, JR., Maj Gen, USAF
Co-Chairman

JAMES F. BOATRIGHT
Co-Chairman

Attachments
1. 485 EIG Redirect
2. BRAC Funding
3. AFRES Options
4. Lab Briefing

Are you speaking to an air quality determination for conformity specifically? why was it not viable?

It might be less convenient - but is it a stopper?

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950315-8

FROM: BINGAMAN, JEFF	TO: PERRY, WILLIAM
TITLE: SENATOR (NM)	TITLE: SEC OF DEFENSE
ORGANIZATION: U.S. CONGRESS	ORGANIZATION: DEPT OF DEFENSE
INSTALLATION (s) DISCUSSED: KIRTLAND AFB	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL				COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR./CONGRESSIONAL LIAISON	✓	1		COMMISSIONER STEELE			
DIR./COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXECUTIVE SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER	✓		
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
				OV	✓		
DIR./INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:
LETTER QUESTIONING THE TREATMENT OF ALBUQUERQUE IN REGARD TO AIR QUALITY CONFORMITY.

Due Date:	Routing Date: 950315	Date Originated 950315	Mail Date:

JEFF BINGAMAN
NEW MEXICO

703 HART SENATE OFFICE BLDG.
WASHINGTON, DC 20510-3102
(202) 224-5521
IN NEW MEXICO--1-800-443-8658
TDD (202) 224-1792
Senator_Bingaman@bingaman.senate.gov

United States Senate

March 15, 1995

The Honorable William Perry
Secretary of Defense
The Pentagon
Washington, D.C. 20301

Please refer to this number when responding 950315-8

Dear Mr. Secretary:

I have obtained the Department of the Air Force Base Closure Executive Group (BCEG) analysis of Air Force facilities considered for closure in the 1995 Base Closure and Realignment (BRAC) round. In the analysis I have found that on December 6, 1994, "the BCEG concluded that all proposed force structure moves should be reviewed for air quality concerns first." They stated that "if the move can't satisfy conformity requirements, the move should not be considered further." On December 15, the BCEG directed that the option of moving Los Angeles Air Force Base (LAAFB) to Kirtland AFB, was not a viable option because of air quality conformity problems in Albuquerque. From this point on, Kirtland was considered a candidate for realignment and LAAFB was essentially immune to closure because the alternative of moving LAAFB to McClellan and Hill was also non-viable.

I have been unable to locate any compelling rationale in the Air Force analysis data which would warrant a non-conformity rating for Kirtland AFB. If indeed the Air Force conducted an analysis which led to the non-conformity conclusion, I would like the results made available to my office. In addition, I would like to know if the Air Force worked in concert with the Environmental Protection Agency in making this decision that so heavily determined the Air Force's decision-making on Kirtland and Los Angeles.

More importantly, I question a BRAC process that does not regard air quality conformity as essentially a non-factor in decision-making. That is the way economic impact is appropriately treated. Obviously any additional difficulty in meeting air quality standards in Albuquerque would be offset by reduced difficulty in meeting such standards in the Los Angeles basin. To preserve many thousands of jobs in Albuquerque and to potentially add thousands more, local officials would surely have sought to take the additional measures needed to insure air quality conformity, had they been afforded that opportunity.

Kirtland would do LA a favor.

ALBUQUERQUE (505) 766-3636
LAS CRUCES (505) 523-6561
ROSWELL (505) 622-7113
SANTA FE (505) 988-6647

Losing 6850 jobs would, on the other hand, adversely affect the local tax base and impede local officials' ability to meet air quality standards.

Finally, I want to reiterate that I believe the Air Force cost figures for Kirtland are seriously flawed. It is clear that significant costs have been omitted, particularly cost-shifting to the Department of Energy's defense programs. It is also unclear thus far whether the civil service and military compensation differentials between Los Angeles and Albuquerque were included in the Air Force cost analysis.

On every military criterion, the BCEG analysis placed Kirtland ahead of Los Angeles. Only on cost and return on investment was Kirtland rated lower. If the cost figures prove to be flawed and the air quality issue, which suddenly we have discovered was a determining factor, proves to be similarly flawed, I am hopeful the BRAC Commission will overturn the Air Force recommendation.

Sincerely,

Jeff Bingaman
United States Senator

JB/jjo
cc: Alan Dixon
Charles Bowsher

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950411-19

FROM:	TO: GENERAL
[redacted] LEGISLATURE	TITLE:
ORGANIZATION: STATE OF NEW MEXICO	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: KIRTLAND AFB	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA	✓		
STAFF DIRECTOR	✓			COMMISSIONER COX	✓		
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS	✓		
GENERAL COUNSEL	✓			COMMISSIONER KLING	✓		
MILITARY EXECUTIVE				COMMISSIONER MONTOYA	✓		
				COMMISSIONER ROBLES	✓		
DIR. CONGRESSIONAL LIAISON	✓			COMMISSIONER STEELE	✓		
DIR. COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
[redacted] IVE SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER	✓		
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
				DP	✓		
DIR. INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING COPY OF HOUSE JOINT MEMORIAL 31, WHICH REQUESTS DOD AND DBCRC TO MAINTAIN FULL OPERATIONS AT KIRTLAND.

[redacted]

Due Date:	Routing Date: 950411	Date Originated:	Mail Date:

The Legislature

of the

Please refer to this number when responding 950411-19

State of New Mexico

42nd Legislature, 1st Session

LAWS 1995

CHAPTER _____

HOUSE JOINT MEMORIAL 31

Introduced by

REPRESENTATIVES RAYMOND G. SANCHEZ, ANNA MARIE CROOK, KIP W. NICELY, ROBERT P. WALLACH, JOE M STELL, JAMES ROGER MADALENA, SAMUEL F. VIGIL, DEBBIE A. RODELLA, GARY KING, LUCIANO "LUCKY" VARELA, WESLEY L. GRAU, GEORGE D. BUFFETT, RICK MIERA, J. PAUL TAYLOR, ARTHUR C. HAWKINS, PAULINE K. GUBBELS, HENRY KIKI SAAVEDRA, EARLENE ROBERTS, GERALD E. WEEKS, TERRY T. MARQUARDT, DAVID M. PARSONS, LARRY A. LARRANAGA, RICHARD T. (DICK) KNOWLES, THOMAS G. DOLLIVER, TED HOBBS, SHERYL M. WILLIAMS, JERRY LEE ALWIN, DELORES C. WRIGHT, DANICE R. PICRAUX, VINCENT "SMILEY" GALLEGOS, FRANK BIRD, VINCE MARTINEZ, JERRY W. SANDEL, PATSY G. TRUJILLO, E. SHIRLEY BACA, CISCO MCSORLEY, NICK L. SALAZAR, ALBERT GURULE, THOMAS P. FOY, GLORIA VAUGHN, JOSE R. ABEYTA, ROBERTO "BOBBY" J. GONZALES, RICHARD "RAY" SANCHEZ, EDDIE CORLEY, BARBARA A. PEREA CASEY, MAX COLL, LYNDA M. LOVEJOY, BEN LUJAN, WALLACE CHARLEY, JAMES G. TAYLOR, MICHAEL OLGUIN, FRED LUNA, EDWARD C. SANDOVAL, LEO C. WATCHMAN, JR., MIMI STEWART AND SAMUEL REYES

A JOINT MEMORIAL

PETITIONING THE UNITED STATES DEPARTMENT OF DEFENSE AND THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION TO MAINTAIN FULL OPERATIONS AT THE KIRTLAND AIR FORCE BASE COMPLEX AND TO CONTINUE DIVERSIFICATION PURSUANT TO THE DEFENSE CONVERSION AND TECHNOLOGY ACT.

WHEREAS, as the nation and New Mexico continue to adjust to federal budget cuts and defense downsizing in the post Cold War era, policymakers are cautioned against jeopardizing the critical national defense infrastructure established over the last fifty years; and

WHEREAS, through the efforts of New Mexico's former congressional delegation, led by Senators Dennis Chavez, Clinton P. Anderson and Joseph Montoya and Congressman Tom Morris, and more recently, by Senators Pete Domenici and Jeff Bingaman and Congressmen Bill Richardson, Joe Skeen and Steve Schiff, New Mexico has made an enormous contribution to national defense and to the stability and growth of the state economy with its ongoing work at its major defense facilities, including Kirtland air force base; and

WHEREAS, these defense facilities provide thousands of jobs in the state and the closure or realignment of any one of these facilities will have a severe economic impact on local economies; and

WHEREAS, policymakers and decisionmakers responsible for the closure and realignment process have already observed the dramatic impact of the closure process on local communities as well as the enormous costs incurred in the closure process; and

WHEREAS, the United States department of defense is urged to recognize the one hundred twenty million dollars ($120,000,000) that has been invested in Kirtland over the past three years, the growing research synergy between the needs of the air force and the United States department of energy and the enduring value of Kirtland as a regional nuclear weapons facility; and

WHEREAS, for over three decades, New Mexico, with its near-perfect flying conditions and varied topography, has proven to be a world class flight training and combat readiness center; and

WHEREAS, New Mexico's demographics, including its emerging minority-majority population, allows the department of defense to both recruit minorities and work with minority subcontractors; and

WHEREAS, recognizing the future value of Kirtland as a modern military base, its potential as a space center and its commitment to civilian technology transfer, the department of defense and the defense base closure and realignment commission are urged to consider those factors in its

deliberations;

NOW, THEREFORE, BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF NEW MEXICO that the United States department of defense and the defense base closure and realignment commission be petitioned to maintain the full integrity of the Kirtland air force base complex; and

BE IT FURTHER RESOLVED that the congressional delegation be requested to work with the New Mexico state legislature in its continuing efforts to diversify the state economy pursuant to the Defense Conversion and Technology Act; and

BE IT FURTHER RESOLVED that copies of this memorial be transmitted to the secretary of the United States department of defense, the defense base closure and realignment commission and the members of the New Mexico congressional delegation.

S/ RAYMOND G. SANCHEZ
RAYMOND G. SANCHEZ, SPEAKER
HOUSE OF REPRESENTATIVES

S/ STEPHEN R. ARIAS
STEPHEN R. ARIAS, CHIEF CLERK
HOUSE OF REPRESENTATIVES

S/ WALTER D. BRADLEY
WALTER D. BRADLEY, PRESIDENT
SENATE

S/ MARGARET LARRAGOITE
MARGARET LARRAGOITE, CHIEF CLERK
SENATE

Document Separator

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950414-17

FROM: BINGAMAN, JEFF	TO: DIXON
TITLE: SENATOR (NM)	TITLE: CHAIRMAN
ORGANIZATION: U. S. CONGRESS	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: KIRTLAND	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR, CONGRESSIONAL LIAISON	✓		
DIR, COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
DEP FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR, INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA			
COMMISSIONER COX			
COMMISSIONER DAVIS			
COMMISSIONER KLING			
COMMISSIONER MONTOYA			
COMMISSIONER ROBLES			
COMMISSIONER STEELE			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER			
AIR FORCE TEAM LEADER	✓		
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

cc/Remarks:

FORWARDING INFO CONCERNING THE AIR QUALITY SITUATION AT KIRTLAND AFB.

INTERESTING AIR QUALITY & ON-GOING IMPLICATIONS INCLUDE

- EXC
- MARY
- Deirdre

[redacted]	Routing Date: 950414	Date Originated: 950414	Mail Date:

Congress of the United States

Washington, DC 20515

Please refer to this number when responding 950414-17

CONTACT: Agnes Oczon/Domenici
(202) 224-7073
Larry Smith/Bingaman
(202) 224-6385
Barry Bitzer/Schiff
(505) 766-2538

FOR IMMEDIATE RELEASE: Friday, April 14, 1995

EPA CONFIRMS DELEGATION CONTENTION: AIR QUALITY IN ALBUQUERQUE CAN ABSORB NEW KIRTLAND JOBS

WASHINGTON -- The regional office of the U.S. Environmental Protection Agency (EPA) has confirmed that the Air Force did not contact the EPA regarding the air quality situation at Kirtland Air Force Base and that there is "substantial room for growth" in Albuquerque.

Senators Pete Domenici and Jeff Bingaman and Congressman Steve Schiff have criticized the Air Force decision to use air quality as a reason for realigning Kirtland instead of Los Angeles Air Force Base.

"This information from the EPA reinforces our conclusion that it was faulty reasoning on the part of the Air Force to use Albuquerque's air quality as a critical factor in its decision not to expand Kirtland," the members of the delegation said. "The Air Force didn't even bother to query the EPA on Albuquerque's air quality before deciding last December that Kirtland was not suitable for expansion. This hasty and incorrect analysis by the Air Force clearly contributed to their later decision to realign Kirtland."

(more)

According to the Environmental Health Department, Albuquerque will soon be reclassified as being within the federal guidelines in all air quality categories. Senators Bingaman and Domenici and Congressman Schiff today also wrote to Carol Browner, the Administrator of the EPA, requesting that she expedite Governor Gary Johnson's application for final approval of Albuquerque's carbon monoxide implementation plan. Johnson submitted the application today to the EPA's Regional Office in Dallas.

###

COPY OF THE LETTER TO THE EPA ATTACHED

United States Senate

WASHINGTON, DC 20510

April 14, 1995

The Honorable Carol Browner
Administrator
Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

Dear Ms. Browner:

Today New Mexico's Governor, Gary E. Johnson, formally submitted to Jane Saginaw, the EPA Region VI Administrator, the State Implementation Plan (SIP) documents pertaining to carbon monoxide in Bernalillo County and requested final approval of the Albuquerque/Bernalillo County inspection/maintenance portion of the carbon monoxide SIP.

We write to ask that Governor Johnson's request be given expedited review by your regional office. As you know from previous correspondence, the Air Force has incorrectly and without consultation with your agency raised questions about whether Kirtland Air Force Base (KAFB) could receive significant numbers of additional personnel because of air quality concerns, specifically pertaining to carbon monoxide, in Albuquerque. Mr. Russell Rhoades of your Dallas office wrote Senator Bingaman April 6 that "it is our understanding that there is substantial room for growth and the City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit expansion of KAFB."

We understand that there has been very close cooperation between your regional office and the Albuquerque Environmental Health Department and New Mexico Environment Department in anticipation of Governor Johnson's submission. While expansion at KAFB can already be done under Albuquerque's current air quality status, we desire to absolutely eliminate any misconceptions on the part of the US Air Force. Therefore, we ask that the EPA review and approval sought by the Governor be carried out by May 15, and in any case no later than June 9. The reason for these dates is that by May 17, the Defense Base Closure and Realignment Commission (BRAC) must decide whether to add bases for realignment consideration and the last chance for Members of Congress to testify to the BRAC will come on June 12-13 with decisions made by July 1.

We believe that it is already clear that the Air Force erred in its environmental analysis in Albuquerque. Final EPA approval of the documents submitted today by Governor Johnson would make that absolutely clear.

Thank you for your consideration of our request.

Sincerely,

Pete V. Domenici
United States Senator

Jeff Bingaman
United States Senator

Steven Schiff
Member of Congress

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 06 1995

Honorable Jeff Bingaman
United States Senate
Washington, DC 20510-3102

Dear Senator Bingaman:

Thank you for your letter of March 15, 1995, concerning Kirtland Air Force Base (KAFB) located in Albuquerque, New Mexico. Specifically, you requested information on whether or not the Environmental Protection Agency (EPA) was consulted, during the course of the Air Force base closure and realignment analysis, regarding the impact to air quality of transferring additional personnel from other closed or realigned bases to KAFB in Albuquerque.

Our records indicated that the EPA Regional Office has not received any communication or document pertaining to the air quality impacts from KAFB or any other agency concerning increase in the staff or expansion at this base. In reference to Ms. Sarah Kotchian's letter of March 20, 1995, to you, it is our understanding that there is substantial room for growth and the City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit the expansion of KAFB.

I hope that the information above adequately covers your questions concerning the KAFB activities. If I can be of any assistance, please contact me.

Sincerely yours,
/s/ Russell F. Rhoades for

Jane N. Saginaw
Regional Administrator

cc: Ms. Sarah Kotchian
Environmental Health Department
Ms. Cecilia Williams
New Mexico Environment Department

OFFICE OF THE GOVERNOR
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

GARY E. JOHNSON
GOVERNOR

(505) 827-3000

April 14, 1995

Ms. Jane Saginaw, Regional Administrator
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Saginaw:

The City of Albuquerque and Bernalillo County have been working to improve air quality in the city and county since the 1970's. Carbon monoxide levels have decreased dramatically through the concerted efforts of the city's and county's citizens, the Albuquerque Department of Environmental Health and many others. Albuquerque has measured carbon monoxide levels for the last three winters which are below the federal ambient standard.

I respectfully request final approval of the attached Albuquerque/Bernalillo County inspection/maintenance(I/M) portion of the carbon monoxide State Implementation Plan (SIP). The SIP was adopted pursuant to the Clean Air Act Amendments of 1990 and 40 Code of Federal Regulations (CFR) Part 51.

The Albuquerque/Bernalillo County Air Quality Control Board approved these plans April 12, 1995 after public hearing as revisions to the New Mexico SIP. To facilitate your review and processing the following materials are enclosed:

1) I/M SIP hearing public record;
2) Federal Register 40 CFR Part 51;
3) NM Air Quality Control Act;
4) Air Quality Control Board Regulation 28, Motor Vehicle Inspection;
5) Transcript of August 1994 public hearing on Regulation 28 amendments;
6) City and County Motor Vehicle Emissions Control Ordinances;
7) City and County Joint Air Quality Control Board Ordinances;
8) City/County joint powers agreement;
9) MOU with State Motor Vehicle Division;
10) NM motor vehicle code, NMSA 66-3-1 through 66-3-28;
11) Vehicle Pollution Management Division (VPMD) Manual;
12) VPMD MIS plan;
13) VPMD public information plan;
14) VPMD training plan;
15) VPMD budget;
16) Vehicle exhaust gas analyzer (VEGAS) Bar 90 specifications;

17) Vehicle inspection report specifications; and
18) Mobile 5a modeling demonstration.

Enclosed with this letter are five copies of the materials listed above.

I look forward to continuing cooperation with your agency that is as successful as the professional coordination between the Albuquerque Environmental Health Department and the Environment Department. If you have any questions, please do not hesitate to contact Sarah B. Kotchian, Director of the Albuquerque Environmental Health Department at (505) 768-2600 or Mark E. Weidler, Secretary of the New Mexico Environment Department at (505) 827-2850.

Sincerely,

Gary E. Johnson
Governor
State of New Mexico

Enclosures

cc: Sarah B. Kotchian, Director, Albuquerque Environmental Health Department.
Mark E. Weidler, Secretary, NM Environment Department

OFFICE OF THE GOVERNOR
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

GARY E. JOHNSON
GOVERNOR

(505) 827-3000

April 14, 1995

Ms. Jane Saginaw, Regional Administrator
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Saginaw:

The City of Albuquerque and Bernalillo County have been working to improve air quality in the city and county since the 1970's. Carbon monoxide levels have decreased dramatically through the concerted efforts of the city's and county's citizens, the Albuquerque Department of Environmental Health and many others. Albuquerque has measured carbon monoxide levels for the last three winters which are below the federal ambient standard.

It is with great pleasure that I respectfully request approval of the attached State Implementation Plan (SIP) documents which are the supplement to the New Mexico SIP Pertaining to Attainment and Maintenance of the National Ambient Air Quality Standards (NAAQS) for Carbon Monoxide in Bernalillo County. The SIP was adopted pursuant to the Clean Air Act Amendments of 1990 and 40 Code of Federal Regulations (CFR) Part 51.

The Albuquerque/Bernalillo County Air Quality Control Board approved these plans on April 13, 1995 after a public hearing as amendments to the New Mexico SIP. To facilitate your review and processing the following materials are enclosed:

1) Completeness Checklist pursuant to 40 CFR 51 Appendix V;
2) SIP document;
3) Hearing record including exhibits;
4) 1993 CO Inventory for Bernalillo County;
5) Projected Inventories for 1996, 1999, 2002, 2005 and 2006;
6) The Board's regulations incorporated in the SIP; and,

AQCR No. 20, Authority-to-Construct Permits;
AQCR No. 28, Motor Vehicle Inspection;
AQCR No. 29, Prevention of Significant Deterioration;
AQCR No. 32, Construction Permits-Non-attainment Areas;
AQCR No. 34, Woodburning;
AQCR No. 35, Alternative Fuels;

AQCR No. 42, Transportation Conformity; and
AQCR No. 43, General Conformity.

7) 1992, 1993, and 1994 State and Local Air Monitoring Summary Reports (SLAMS).

Enclosed with this letter are five copies of the materials listed above for each SIP document.

I look forward to continuing cooperation with your agency that is as successful as the professional coordination between the Albuquerque Environmental Health Department and the Environment Department. If you have any questions, please do not hesitate to contact Sarah B. Kotchian, Director of the Albuquerque Environmental Health Department at (505) 768-2600 or Mark E. Weidler, Secretary of the New Mexico Environment Department at (505) 827-2850.

Sincerely,

Gary E. Johnson

Gary B. Johnson
Governor
State of New Mexico

Enclosures

cc: Sarah B. Kotchian, Director, Albuquerque Environmental Health Department
Mark E. Weidler, Secretary, NM Environment Department

United States Senate

WASHINGTON, DC 20510

April 13, 1995

General Thomas S. Moorman, Jr.
Vice Chief of Staff
United States Air Force
Room 4E936
The Pentagon
Washington, DC 20301

Dear General Moorman:

Thank you for providing us with a copy of your memo dated April 5, 1995 on the space test and experimentation consolidation at Kirtland Air Force Base.

We are, however, very disappointed with the contents of your memo to General Yates. Essentially you direct Air Force Materiel Command to proceed with the Los Angeles portion of the relocation (121 positions including contractors), to plan for the San Bernardino portion of the transfer beginning October 1, 1995 (57 positions including contractors), and to limit the Onizuka transfer (357 positions including contractors) to no more than 20 personnel pending the final results of the 1995 BRAC process. You also limit total military personnel in the space test and experimentation unit at Kirtland to 62 in anticipation of implementing the Air Force recommendation on realignment of Kirtland. You put off a final decision on whether the SMC/TE units at San Bernadino and Onizuka will be consolidated at Kirtland until resolution of the BRAC 95 recommendations.

In its December 8, 1994 report to the Secretary of the Air Force, Materiel Command concluded that:

> "The benefits of this consolidation, modernization, and relocation of SMC/CU (now SMC/TE) far outweigh the relatively small cost involved. The Air Force space mission will be strengthened; satellite control operating and maintenance costs will be reduced; customers will benefit from better support and lower costs; AFSPC will gain access to a spacecraft residual operations center; the AFSCN CCS upgrade efforts will benefit from lessons learned with actual on-line open architecture systems; the DOE will gain access to a worldwide satellite control system with minimal investment; and the DOD will preserve and strengthen the essence of its space and missile RDT&E assets. There can be no question that this is the right action to take -- and with downsizing and declining budgets ahead, this is the right time to take it!
>
> " Not just SMC, and not just AFMC, but the entire Air Force top management is committed to this forward looking

move which will strengthen its space capability while cutting costs!"

The only change since this report was written is the Air Force BRAC recommendation. As we understand it, the Base Closure Executive Group imposed an arbitrary 100-person limit on military personnel at Kirtland as part of the realignment proposal in order to insure that the support now provided to Kirtland tenants by the 377th Air Base Wing would no longer be necessary. That arbitrary limit now appears to be denying the Air Force the full benefits of space T&E consolidation which were so eloquently and enthusiastically described in the AFMC report cited above.

We obviously are fighting to reverse the Air Force realignment proposal for Kirtland before the Defense Base Closure and Realignment Commission. We hope to be successful. But in any case it makes no sense to delay the consolidation of SMC/TE, which would clearly reside in the Phillips Lab cantonment even under the Air Force proposal.

We understand that Phillips Laboratory and AFMC have already argued that the minimum number of military personnel remaining at Phillips under the Air Force proposal is 212. Your April 5 memo allows 62 more military personnel as part of SMC/TE. Obviously, the 100-military personnel limit is now moot. Accordingly, we see no reason not to proceed with the full SMC/TE consolidation, which would add another 97 military personnel under December 8 AFMC plan.

We therefore request that you reconsider your April 5 decision and that you direct that the full SMC/TE consolidation proceed as planned. In any case, we request that no action be taken by the Air Force that would preclude the full consolidation from taking place and the full benefits from being achieved as originally planned by AFMC.

Thank you for your consideration of our views.

Sincerely,

Jeff Bingaman
United States Senator

Pete V. Domenici
United States Senator

Steven Schiff
Member of Congress

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON DC 20330

5 APR 1995

MEMORANDUM FOR HQ AFMC/CC

FROM: HQ USAF/CV
1670 Air Force Pentagon
Washington, DC 20330-1670

SUBJECT: Space Test and Experimentation (SMC/CU) Consolidation at Kirtland AFB, NM (HQ USAF/CC 14 Mar 95 Memo, same subject)

1. Reference HQ USAF/CC letter placed the entire consolidation of the SMC/CU (now SMC/TE) on hold pending the final outcome of the 1995 BRAC process. After an on-site review at Kirtland, the following direction is provided:

a. Continue the relocation of the Los Angeles portion of SMC/TE to Kirtland. This unit, which is in transition, is unable to efficiently accomplish its mission. Reconstitution of this portion of the SMC/TE will ensure the vital operational support to the space and missile missions is continued.

b. Proceed with the planning for transfer (beginning 1 Oct 95) of all SMC/TEB Rocket Systems Launch Program Office (RSLP) military and civilian positions and personnel from San Bernardino (Norton AFB) CA to Kirtland AFB NM. This action will be accomplished in accordance with the Brown Amendment.

c. Minimize the transfer of SMC/TEO (Det 2, SMC) positions and personnel (to no more than 20) from Onizuka AS CA to Kirtland AFB NM pending final results of the BRAC 95 process. These personnel are required to maintain and operate already installed satellite command and control equipment at Kirtland AFB which will be required to prevent a break in mission capability associated with the transfer.

d. Delay any decision on where to locate SMC/TEO's deployable telemetry system and their associated support personnel from Onizuka AS CA pending results of the BRAC 95 process.

2. The Air Force will work to include SMC/TE as an organization that will remain at Kirtland AFB NM if the Secretary of Defense's recommendation on Kirtland AFB realignment is approved by the BRAC.

3. In anticipation of Kirtland AFB realignment under BRAC, SMC/TE will take no action which would preclude reaching an end state during the BRAC 95 implementation period of a maximum of 62 military personnel. A final decision on whether SMC/TE units at San Bernardino CA and Onizuka AS will be consolidated at Kirtland AFB will be provided after resolution of the BRAC 95 recommendations.

Thomas S. Moorman Jr.

THOMAS S. MOORMAN, Jr.
General, USAF
Vice Chief of Staff

cc:
HQ SMC/CC
SMC/TE
Phillips Lab Director
377 Wing/CC

EXCERPT FROM AFMC DEC 8, 1994 STUDY

IMPACT OF THE CONSOLIDATION ON MILITARY, CIVILIAN AND CONTRACTOR PERSONNEL

The consolidation and relocation of SMC/CU will affect a total of 535 positions (as of 14 July 1994) versus the 602 originally projected. Table 1 lists the breakdown of this total by both location and by type of position. Figure 9 illustrates the planned movement of these positions over the next 24 months. Figures 5–7 in the previous section illustrate the movement from individual bases.

TOTAL AFFECTED POSITIONS

Based on UMDs — 14 July 94
Total Positions Transferring from CA to NM

UNIT	MIL	CIV	AERO	CONTR	TOTAL
CU at LA	66	32	23	0	121
CUB at Norton	17	22	0	18	57
CUO at Onizuka	76	36	6	239	357
TOTAL	159	90	29	257	535

Table 1 — Total Affected Positions

An Environmental Assessment, completed in January 1994 (see Appendix B), concluded there would be no significant socioeconomic impacts resulting from the proposed relocation. The total numbers of jobs affected in the Los Angeles and San Franciso metropolitan areas are insignificant compared to the overall work force in those areas. The loss of jobs in the San Bernardino area are also insignificant but have been precipitated by the BRAC closure of Norton AFB.

As seen above, a total of only 159 military positions will be affected by the relocation. The relocation is not considered a "unit move" and therefore incumbents will not be automatically reassigned with their slots. Because the transition is spread over a two-year period, most of the personnel filling these positions will move to new assignments via the normal military reassignment process (PCS/PCA) rather than relocate to KAFB. Most military positions will be transferred to KAFB empty. The vacant slots will then be filled at KAFB by new incoming officers via

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

13 APR 1995

HQ USAF/RT
1670 Air Force Pentagon
Washington DC 20330-1670

The Honorable Jeff Bingaman
United States Senate
Washington, DC 20510

Dear Senator Bingaman

This letter responds to your letter of April 11, 1995, regarding Kirtland Air Force Base, New Mexico, and your request for the refined cost elements resulting from the site survey. I understand your concern, and desire to have the latest available data in preparation for the Commission hearing. Unfortunately, we remain unable to comply with your request. You have expressed concern over a process that would be unreliable because of inaccuracy and the haste of its completion. Our validation and certification process is designed to avoid these problems.

As you know, we met for the past two days with Kirtland Officials, including agencies such as the Department of Energy (DOE) to obtain their detailed cost information. We will continue our process, validate the estimates at the Major Command level, and present those refinements to the Base Closure Executive Group for approval. We are working as rapidly as we can and will provide this information to you as soon as possible. We are committed to an open process, but are equally committed to a process that properly develops accurate information prior to its release.

A similar letter is being provided to Senator Domenici and Representative Schiff.

Sincerely

Jay D. Blume

JAY D. BLUME, Jr.
Major General, USAF
Special Assistant to the Chief of Staff
for Base Realignment and Transition

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC 20330-1000

OFFICE OF THE SECRETARY

April 13, 1995

SAF/LLP
1160 Air Force Pentagon
Washington, DC 20330-1160

The Honorable Jeff Bingaman
United States Senate
Washington, DC 20510

Dear Senator Bingaman

This is in response to your joint letter of April 3, 1995, to the Secretary of the Air Force concerning Kirtland Air Force Base (AFB), New Mexico. Specifically, you requested additional information concerning the methodology used to determine whether tenants are relocated to other installations. The following responses are provided per your request.

QUESTION: Does the Air Force use below 100 active duty personnel as a guideline for reducing active duty support functions? Is there written policy or guidelines? If so, please provide us copies of relevant documents.

RESPONSE: No known policy exists, either formally or informally. The specific requirement was that the remaining active duty personnel were to be capable of operating with minimal support. The Base Closure Executive Group's (BCEG) collective judgment was that if remaining active duty personnel were around 100, this would be compatible with the strategy.

QUESTION: Does DoD have guidelines on the number of active duty personnel that are required on an installation or in a facility to justify normal active duty support functions? If so, please provide us copies of relevant documents.

RESPONSE: No known policy exists, formally or informally.

QUESTION: Explain the Air Force's use of baseline populations and adjusted populations. Given the Air Force's projected end-strength numbers for future years, has the Air Force applied a standard population reduction across the board (all bases, tenants, mission, etc.)? If so, why? Are the reductions the same for officers, enlisted, and civilians? If so, why?

RESPONSE: The Air Force used the Fiscal Year (FY) 1994 position of the August 1994 base manpower file to set a baseline population for each installation meeting the BRAC threshold. However, there invariably are manning changes programmed to occur at any base over time. The Air Force reviewed each individual installation and adjusted the "baseline" officer, enlisted, and civilian populations based on specific program changes incorporated in the Future Year Defense Program but not yet reflected in the base manpower files. The adjustments made were unique to each base; there was no across the board judgment factor. This resulting "adjusted" population was used as the basis for determining manpower moves and savings in the COBRA analysis. The result was the best available projection for fourth quarter, FY 1997.

QUESTION: What space and facilities were identified at Kelly AFB to be used to beddown the Air Force Inspection Agency and Air Force Safety Center (AFSC) and DNA? Are these facilities and space currently occupied by depot functions? Will these facilities be made available by "depot downsizing in-place?

RESPONSE: The Air Force Inspection Agency (AFIA) and Air Force Safety Agency (AFSA) military construction (MILCON) estimates in the recommendation COBRA along with Defense Nuclear Agency Field Command (DNAFC) were placed in multiple available facilities. Originally, Kelly AFB identified 70,000 square feet of administrative space available for DNAFC after completion of the Weapon Systems Support Center in December 1996. Kelly AFB also identified Buildings 43, 323, 1500 and 1562 with a total of 109,076 square feet of administrative space as being available for inbound activities, such as AFIA and AFSA. The 40,905 square feet space requirements for AFIA and AFSC were applied against the available administrative space at Kelly AFB. Facilities were to be made available after completion of the Weapon Systems Support Center in December 1996 rather than "depot downsizing".

QUESTION: What was the Air Force's beddown plan for these Kirtland tenants when Kelly AFB was a closure candidate? Will you suggest to the Commission that they use your alternate Kirtland plans if Kelly's depot is added to the Commission's list and endorsed for closure?

RESPONSE: No set alternative Air Force beddown plan exists. If Kelly AFB was a closure candidate, we would have revisited the Air Force's beddown plan for the Kirtland AFB realignment.

QUESTION: Since the cost savings that the USAF is claiming are due to personnel eliminations, should we expect the USAF active duty end-strength to show a reduction from 381,900 personnel to 277,100 in FY 2001 to reflect the actualization of the BRAC reported cost savings?

RESPONSE: We are unable to track to the specific end-strength numbers raised in the question. However, the basic premise of the question is valid. Air Force active duty strength will be reduced as a result of implementing BRAC actions. Specifically, with regard to Kirtland AFB, the Air Force proposal identified an active duty manpower savings of 922 active duty positions which will be reduced from overall Air Force end-strength. Other active duty positions move within their missions to their new locations. On the civilian side, the BRAC savings will be used to programmatically define the National Performance Review civilian reductions already levied against the Air Force.

QUESTION: Would you agree that the USAF can follow only one of two options: Claim the recurring savings and reduce the end-strength by 4800; or do not reduce the end-strength by 4800 and do not claim the recurring savings.

RESPONSE: We are unable to track to the specific 4800 end-strength number raised in the question. However, the basic premise of the question is valid; Air Force active duty strength will be reduced as a result of implementing BRAC actions. On the civilian side, the BRAC savings will be used to programmatically define the National Performance Review civilian reductions already levied against the Air Force. Recurring savings are linked to personnel eliminations in the COBRA. The Kirtland AFB realignment recommendation COBRA had 1375 personnel eliminations with a recurring savings of $52.1 million.

We trust this information is useful. A similar letter is being provided to Senator Domenici and Representative Schiff.

Sincerely

STEPHEN D. BULL, III
Colonel, USAF
Chief, Programs and Legislation Division
Office of Legislative Liaison

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950414-17

FROM: BINGAMAN, JEFF	TO: DIXON
TITLE: SENATOR (NM)	TITLE: CHAIRMAN
ORGANIZATION: U. S. CONGRESS	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: KIRTLAND	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL	✓			COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR. CONGRESSIONAL LIAISON	✓			COMMISSIONER STEELE			
DIR. COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXEC. SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER	✓		
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
				DF			
DIR. INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING INFO CONCERNING THE AIR QUALITY SITUATION AT KIRTLAND AFB.

Note:	Routing Date: 950414	Date Originated: 950414	Mail Date:

Congress of the United States

Washington, DC 20515

Please refer to this number when responding 950414-V7

CONTACT: Agnes Oczon/Domenici
(202) 224-7073
Larry Smith/Bingaman
(202) 224-6385
Barry Bitzer/Schiff
(505) 766-2538

FOR IMMEDIATE RELEASE: Friday, April 14, 1995

EPA CONFIRMS DELEGATION CONTENTION: AIR QUALITY IN ALBUQUERQUE CAN ABSORB NEW KIRTLAND JOBS

WASHINGTON -- The regional office of the U.S. Environmental Protection Agency (EPA) has confirmed that the Air Force did not contact the EPA regarding the air quality situation at Kirtland Air Force Base and that there is "substantial room for growth" in Albuquerque.

Senators Pete Domenici and Jeff Bingaman and Congressman Steve Schiff have criticized the Air Force decision to use air quality as a reason for realigning Kirtland instead of Los Angeles Air Force Base.

"This information from the EPA reinforces our conclusion that it was faulty reasoning on the part of the Air Force to use Albuquerque's air quality as a critical factor in its decision not to expand Kirtland," the members of the delegation said. "The Air Force didn't even bother to query the EPA on Albuquerque's air quality before deciding last December that Kirtland was not suitable for expansion. This hasty and incorrect analysis by the Air Force clearly contributed to their later decision to realign Kirtland."

(more)

According to the Environmental Health Department, Albuquerque will soon be reclassified as being within the federal guidelines in all air quality categories. Senators Bingaman and Domenici and Congressman Schiff today also wrote to Carol Browner, the Administrator of the EPA, requesting that she expedite Governor Gary Johnson's application for final approval of Albuquerque's carbon monoxide implementation plan. Johnson submitted the application today to the EPA's Regional Office in Dallas.

###

COPY OF THE LETTER TO THE EPA ATTACHED

United States Senate

WASHINGTON, DC 20510

April 14, 1995

The Honorable Carol Browner
Administrator
Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

Dear Ms. Browner:

Today New Mexico's Governor, Gary E. Johnson, formally submitted to Jane Saginaw, the EPA Region VI Administrator, the State Implementation Plan (SIP) documents pertaining to carbon monoxide in Bernalillo County and requested final approval of the Albuquerque/Bernalillo County inspection/maintenance portion of the carbon monoxide SIP.

We write to ask that Governor Johnson's request be given expedited review by your regional office. As you know from previous correspondence, the Air Force has incorrectly and without consultation with your agency raised questions about whether Kirtland Air Force Base (KAFB) could receive significant numbers of additional personnel because of air quality concerns, specifically pertaining to carbon monoxide, in Albuquerque. Mr. Russell Rhoades of your Dallas office wrote Senator Bingaman April 6 that "it is our understanding that there is substantial room for growth and the City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit expansion of KAFB."

We understand that there has been very close cooperation between your regional office and the Albuquerque Environmental Health Department and New Mexico Environment Department in anticipation of Governor Johnson's submission. While expansion at KAFB can already be done under Albuquerque's current air quality status, we desire to absolutely eliminate any misconceptions on the part of the US Air Force. Therefore, we ask that the EPA review and approval sought by the Governor be carried out by May 15, and in any case no later than June 9. The reason for these dates is that by May 17, the Defense Base Closure and Realignment Commission (BRAC) must decide whether to add bases for realignment consideration and the last chance for Members of Congress to testify to the BRAC will come on June 12-13 with decisions made by July 1.

We believe that it is already clear that the Air Force erred in its environmental analysis in Albuquerque. Final EPA approval of the documents submitted today by Governor Johnson would make that absolutely clear.

Thank you for your consideration of our request.

Sincerely,

Pete V. Domenici
United States Senator

Jeff Bingaman
United States Senator

Steven Schiff
Member of Congress

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 06 1995

Honorable Jeff Bingaman
United States Senate
Washington, DC 20510-3102

Dear Senator Bingaman:

Thank you for your letter of March 15, 1995, concerning Kirtland Air Force Base (KAFB) located in Albuquerque, New Mexico. Specifically, you requested information on whether or not the Environmental Protection Agency (EPA) was consulted, during the course of the Air Force base closure and realignment analysis, regarding the impact to air quality of transferring additional personnel from other closed or realigned bases to KAFB in Albuquerque.

Our records indicated that the EPA Regional Office has not received any communication or document pertaining to the air quality impacts from KAFB or any other agency concerning increase in the staff or expansion at this base. In reference to Ms. Sarah Kotchian's letter of March 20, 1995, to you, it is our understanding that there is substantial room for growth and the City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit the expansion of KAFB.

I hope that the information above adequately covers your questions concerning the KAFB activities. If I can be of any assistance, please contact me.

Sincerely yours,
/s/ Russell F. Rhoades for

Jane N. Saginaw
Regional Administrator

cc: Ms. Sarah Kotchian
Environmental Health Department
Ms. Cecilia Williams
New Mexico Environment Department

OFFICE OF THE GOVERNOR
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

GARY E. JOHNSON
GOVERNOR

(505) 827-3000

April 14, 1995

Ms. Jane Saginaw, Regional Administrator
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Saginaw:

The City of Albuquerque and Bernalillo County have been working to improve air quality in the city and county since the 1970's. Carbon monoxide levels have decreased dramatically through the concerted efforts of the city's and county's citizens, the Albuquerque Department of Environmental Health and many others. Albuquerque has measured carbon monoxide levels for the last three winters which are below the federal ambient standard.

I respectfully request final approval of the attached Albuquerque/Bernalillo County inspection/maintenance(I/M) portion of the carbon monoxide State Implementation Plan (SIP). The SIP was adopted pursuant to the Clean Air Act Amendments of 1990 and 40 Code of Federal Regulations (CFR) Part 51.

The Albuquerque/Bernalillo County Air Quality Control Board approved these plans April 12, 1995 after public hearing as revisions to the New Mexico SIP. To facilitate your review and processing the following materials are enclosed:

1) I/M SIP hearing public record;
2) Federal Register 40 CFR Part 51;
3) NM Air Quality Control Act;
4) Air Quality Control Board Regulation 28, Motor Vehicle Inspection;
5) Transcript of August 1994 public hearing on Regulation 28 amendments;
6) City and County Motor Vehicle Emissions Control Ordinances;
7) City and County Joint Air Quality Control Board Ordinances;
8) City/County joint powers agreement;
9) MOU with State Motor Vehicle Division;
10) NM motor vehicle code, NMSA 66-3-1 through 66-3-28;
11) Vehicle Pollution Management Division (VPMD) Manual;
12) VPMD MIS plan;
13) VPMD public information plan;
14) VPMD training plan;
15) VPMD budget;
16) Vehicle exhaust gas analyzer (VEGAS) Bar 90 specifications;

17) Vehicle inspection report specifications; and
18) Mobile 5a modeling demonstration.

Enclosed with this letter are five copies of the materials listed above.

I look forward to continuing cooperation with your agency that is as successful as the professional coordination between the Albuquerque Environmental Health Department and the Environment Department. If you have any questions, please do not hesitate to contact Sarah B. Kotchian, Director of the Albuquerque Environmental Health Department at (505) 768-2600 or Mark E. Weidler, Secretary of the New Mexico Environment Department at (505) 827-2050.

Sincerely,

Gary E. Johnson
Governor
State of New Mexico

Enclosures

cc: Sarah B. Kotchian, Director, Albuquerque Environmental Health Department.
Mark E. Weidler, Secretary, NM Environment Department

OFFICE OF THE GOVERNOR
STATE CAPITOL
SANTA FE, NEW MEXICO 87503

GARY E. JOHNSON
GOVERNOR

(505) 827-3000

April 14, 1995

Ms. Jane Saginaw, Regional Administrator
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Saginaw:

The City of Albuquerque and Bernalillo County have been working to improve air quality in the city and county since the 1970's. Carbon monocide levels have decreased dramatically through the concerted efforts of the city's and county's citizens, the Albuquerque Department of Environmental Health and many others. Albuquerque has measured carbon monocide levels for the last three winters which are below the federal ambient standard.

It is with great pleasure that I respectfully request approval of the attached State Implementation Plan (SIP) documents which are the supplement to the New Mexico SIP Pertaining to Attainment and Maintenance of the National Ambient Air Quality Standards (NAAQS) for Carbon Monocide in Bernalillo County. The SIP was adopted pursuant to the Clean Air Act Amendments of 1990 and 40 Code of Federal Regulations (CFR) Part 51.

The Albuquerque/Bernalillo County Air Quality Control Board approved these plans on April 13, 1995 after a public hearing as amendments to the New Mexico SIP. To facilitate your review and processing the following materials are enclosed:

1) Completeness Checklist pursuant to 40 CFR 51 Appendix V;
2) SIP document;
3) Hearing record including exhibits;
4) 1993 CO Inventory for Bernalillo County;
5) Projected Inventories for 1996, 1999, 2002, 2005 and 2006;
6) The Board's regulations incorporated in the SIP; and,

AQCR No. 20, Authority-to-Construct Permits;
AQCR No. 28, Motor Vehicle Inspection;
AQCR No. 29, Prevention of Significant Deterioration;
AQCR No. 32, Construction Permits-Non-attainment Areas;
AQCR No. 34, Woodburning;
AQCR No. 35, Alternative Fuels;

AQCR No. 42, Transportation Conformity; and
AQCR No. 43, General Conformity.

7) 1992, 1993, and 1994 State and Local Air Monitoring Summary Reports (SLAMS).

Enclosed with this letter are five copies of the materials listed above for each SIP document.

I look forward to continuing cooperation with your agency that is as successful as the professional coordination between the Albuquerque Environmental Health Department and the Environment Department. If you have any questions, please do not hesitate to contact Sarah B. Kotchian, Director of the Albuquerque Environmental Health Department at (505) 768-2600 or Mark E. Weidler, Secretary of the New Mexico Environment Department at (505) 827-2850.

Sincerely,

Gary E. Johnson

Gary E. Johnson
Governor
State of New Mexico

Enclosures

cc: Sarah B. Kotchian, Director, Albuquerque Environmental Health Department
Mark E. Weidler, Secretary, NM Environment Department

United States Senate

WASHINGTON, DC 20510

April 13, 1995

General Thomas S. Moorman, Jr.
Vice Chief of Staff
United States Air Force
Room 4E936
The Pentagon
Washington, DC 20301

Dear General Moorman:

Thank you for providing us with a copy of your memo dated April 5, 1995 on the space test and experimentation consolidation at Kirtland Air Force Base.

We are, however, very disappointed with the contents of your memo to General Yates. Essentially you direct Air Force Materiel Command to proceed with the Los Angeles portion of the relocation (121 positions including contractors), to plan for the San Bernardino portion of the transfer beginning October 1, 1995 (57 positions including contractors), and to limit the Onizuka transfer (357 positions including contractors) to no more than 20 personnel pending the final results of the 1995 BRAC process. You also limit total military personnel in the space test and experimentation unit at Kirtland to 62 in anticipation of implementing the Air Force recommendation on realignment of Kirtland. You put off a final decision on whether the SMC/TE units at San Bernadino and Onizuka will be consolidated at Kirtland until resolution of the BRAC 95 recommendations.

In its December 8, 1994 report to the Secretary of the Air Force, Materiel Command concluded that:

> "The benefits of this consolidation, modernization, and relocation of SMC/CU (now SMC/TE) far outweigh the relatively small cost involved. The Air Force space mission will be strengthened; satellite control operating and maintenance costs will be reduced; customers will benefit from better support and lower costs; AFSPC will gain access to a spacecraft residual operations center; the AFSCN CCS upgrade efforts will benefit from lessons learned with actual on-line open architecture systems; the DOE will gain access to a worldwide satellite control system with minimal investment; and the DOD will preserve and strengthen the essence of its space and missile RDT&E assets. There can be no question that this is the right action to take -- and with downsizing and declining budgets ahead, this is the right time to take it!
>
> " Not just SMC, and not just AFMC, but the entire Air Force top management is committed to this forward looking

move which will strengthen its space capability while cutting costs!"

The only change since this report was written is the Air Force BRAC recommendation. As we understand it, the Base Closure Executive Group imposed an arbitrary 100-person limit on military personnel at Kirtland as part of the realignment proposal in order to insure that the support now provided to Kirtland tenants by the 377th Air Base Wing would no longer be necessary. That arbitrary limit now appears to be denying the Air Force the full benefits of space T&E consolidation which were so eloquently and enthusiastically described in the AFMC report cited above.

We obviously are fighting to reverse the Air Force realignment proposal for Kirtland before the Defense Base Closure and Realignment Commission. We hope to be successful. But in any case it makes no sense to delay the consolidation of SMC/TE, which would clearly reside in the Phillips Lab cantonment even under the Air Force proposal.

We understand that Phillips Laboratory and AFMC have already argued that the minimum number of military personnel remaining at Phillips under the Air Force proposal is 212. Your April 5 memo allows 62 more military personnel as part of SMC/TE. Obviously, the 100-military personnel limit is now moot. Accordingly, we see no reason not to proceed with the full SMC/TE consolidation, which would add another 97 military personnel under December 8 AFMC plan.

We therefore request that you reconsider your April 5 decision and that you direct that the full SMC/TE consolidation proceed as planned. In any case, we request that no action be taken by the Air Force that would preclude the full consolidation from taking place and the full benefits from being achieved as originally planned by AFMC.

Thank you for your consideration of our views.

Sincerely,

Jeff Bingaman
United States Senator

Pete V. Domenici
United States Senator

Steven Schiff
Member of Congress

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON DC 20330

5 APR 1995

MEMORANDUM FOR HQ AFMC/CC

FROM: HQ USAF/CV
1670 Air Force Pentagon
Washington, DC 20330-1670

SUBJECT: Space Test and Experimentation (SMC/CU) Consolidation at Kirtland AFB, NM (HQ USAF/CC 14 Mar 95 Memo, same subject)

1. Reference HQ USAF/CC letter placed the entire consolidation of the SMC/CU (now SMC/TE) on hold pending the final outcome of the 1995 BRAC process. After an on-site review at Kirtland, the following direction is provided:

a. Continue the relocation of the Los Angeles portion of SMC/TE to Kirtland. This unit, which is in transition, is unable to efficiently accomplish its mission. Reconstitution of this portion of the SMC/TE will ensure the vital operational support to the space and missile missions is continued.

b. Proceed with the planning for transfer (beginning 1 Oct 95) of all SMC/TEB Rocket Systems Launch Program Office (RSLP) military and civilian positions and personnel from San Bernardino (Norton AFB) CA to Kirtland AFB NM. This action will be accomplished in accordance with the Brown Amendment.

c. Minimize the transfer of SMC/TEO (Det 2, SMC) positions and personnel (to no more than 20) from Onizuka AS CA to Kirtland AFB NM pending final results of the BRAC 95 process. These personnel are required to maintain and operate already installed satellite command and control equipment at Kirtland AFB which will be required to prevent a break in mission capability associated with the transfer.

d. Delay any decision on where to locate SMC/TEO's deployable telemetry system and their associated support personnel from Onizuka AS CA pending results of the BRAC 95 process.

2. The Air Force will work to include SMC/TE as an organization that will remain at Kirtland AFB NM if the Secretary of Defense's recommendation on Kirtland AFB realignment is approved by the BRAC.

3. In anticipation of Kirtland AFB realignment under BRAC, SMC/TE will take no action which would preclude reaching an end state during the BRAC 95 implementation period of a maximum of 62 military personnel. A final decision on whether SMC/TE units at San Bernardino CA and Onizuka AS will be consolidated at Kirtland AFB will be provided after resolution of the BRAC 95 recommendations.

Thomas S. Moorman Jr.

THOMAS S. MOORMAN, Jr.
General, USAF
Vice Chief of Staff

cc:
HQ SMC/CC
SMC/TE
Phillips Lab Director
377 Wing/CC

EXCERPT FROM AFMC ABC & A44 STUDY

IMPACT OF THE CONSOLIDATION ON MILITARY, CIVILIAN AND CONTRACTOR PERSONNEL

The consolidation and relocation of SMC/CU will affect a total of 535 positions (as of 14 July 1994) versus the 602 originally projected. Table 1 lists the breakdown of this total by both location and by type of position. Figure 9 illustrates the planned movement of these positions over the next 24 months. Figures 5–7 in the previous section illustrate the movement from individual bases.

TOTAL AFFECTED POSITIONS

Based on UMDs — 14 July 94
Total Positions Transferring from CA to NM

UNIT	MIL	CIV	AERO	CONTR	TOTAL
CU at LA	66	32	23	0	121
CUB at Norton	17	22	0	18	57
CUO at Onizuka	76	36	6	239	357
TOTAL	159	90	29	257	535

Table 1 — Total Affected Positions

An Environmental Assessment, completed in January 1994 (see Appendix B), concluded there would be no significant socioeconomic impacts resulting from the proposed relocation. The total numbers of jobs affected in the Los Angeles and San Franciso metropolitan areas are insignificant compared to the overall work force in those areas. The loss of jobs in the San Bernardino area are also insignificant but have been precipitated by the BRAC closure of Norton AFB.

As seen above, a total of only 159 military positions will be affected by the relocation. The relocation is not considered a "unit move" and therefore incumbents will not be automatically reassigned with their slots. Because the transition is spread over a two-year period, most of the personnel filling these positions will move to new assignments via the normal military reassignment process (PCS/PCA) rather than relocate to KAFB. Most military positions will be transferred to KAFB empty. The vacant slots will then be filled at KAFB by new incoming officers via

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

13 APR 1995

HQ USAF/RT
1670 Air Force Pentagon
Washington DC 20330-1670

The Honorable Jeff Bingaman
United States Senate
Washington, DC 20510

Dear Senator Bingaman

This letter responds to your letter of April 11, 1995, regarding Kirtland Air Force Base, New Mexico, and your request for the refined cost elements resulting from the site survey. I understand your concern, and desire to have the latest available data in preparation for the Commission hearing. Unfortunately, we remain unable to comply with your request. You have expressed concern over a process that would be unreliable because of inaccuracy and the haste of its completion. Our validation and certification process is designed to avoid these problems.

As you know, we met for the past two days with Kirtland Officials, including agencies such as the Department of Energy (DOE) to obtain their detailed cost information. We will continue our process, validate the estimates at the Major Command level, and present those refinements to the Base Closure Executive Group for approval. We are working as rapidly as we can and will provide this information to you as soon as possible. We are committed to an open process, but are equally committed to a process that properly develops accurate information prior to its release.

A similar letter is being provided to Senator Domenici and Representative Schiff.

Sincerely

Jay D. Blume Jr.

JAY D. BLUME, Jr.
Major General, USAF
Special Assistant to the Chief of Staff
for Base Realignment and Transition

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC 20330-1000

OFFICE OF THE SECRETARY

April 13, 1995

SAF/LLP
1160 Air Force Pentagon
Washington, DC 20330-1160

The Honorable Jeff Bingaman
United States Senate
Washington, DC 20510

Dear Senator Bingaman

This is in response to your joint letter of April 3, 1995, to the Secretary of the Air Force concerning Kirtland Air Force Base (AFB), New Mexico. Specifically, you requested additional information concerning the methodology used to determine whether tenants are relocated to other installations. The following responses are provided per your request.

QUESTION: Does the Air Force use below 100 active duty personnel as a guideline for reducing active duty support functions? Is there written policy or guidelines? If so, please provide us copies of relevant documents.

RESPONSE: No known policy exists, either formally or informally. The specific requirement was that the remaining active duty personnel were to be capable of operating with minimal support. The Base Closure Executive Group's (BCEG) collective judgment was that if remaining active duty personnel were around 100, this would be compatible with the strategy.

QUESTION: Does DoD have guidelines on the number of active duty personnel that are required on an installation or in a facility to justify normal active duty support functions? If so, please provide us copies of relevant documents.

RESPONSE: No known policy exists, formally or informally.

QUESTION: Explain the Air Force's use of baseline populations and adjusted populations. Given the Air Force's projected end-strength numbers for future years, has the Air Force applied a standard population reduction across the board (all bases, tenants, mission, etc.)? If so, why? Are the reductions the same for officers, enlisted, and civilians? If so, why?

RESPONSE: The Air Force used the Fiscal Year (FY) 1994 position of the August 1994 base manpower file to set a baseline population for each installation meeting the BRAC threshold. However, there invariably are manning changes programmed to occur at any base over time. The Air Force reviewed each individual installation and adjusted the "baseline" officer, enlisted, and civilian populations based on specific program changes incorporated in the Future Year Defense Program but not yet reflected in the base manpower files. The adjustments made were unique to each base; there was no across the board judgment factor. This resulting "adjusted" population was used as the basis for determining manpower moves and savings in the COBRA analysis. The result was the best available projection for fourth quarter, FY 1997.

QUESTION: What space and facilities were identified at Kelly AFB to be used to beddown the Air Force Inspection Agency and Air Force Safety Center (AFSC) and DNA? Are these facilities and space currently occupied by depot functions? Will these facilities be made available by "depot downsizing in-place?

RESPONSE: The Air Force Inspection Agency (AFIA) and Air Force Safety Agency (AFSA) military construction (MILCON) estimates in the recommendation COBRA along with Defense Nuclear Agency Field Command (DNAFC) were placed in multiple available facilities. Originally, Kelly AFB identified 70,000 square feet of administrative space available for DNAFC after completion of the Weapon Systems Support Center in December 1996. Kelly AFB also identified Buildings 43, 323, 1500 and 1562 with a total of 109,076 square feet of administrative space as being available for inbound activities, such as AFIA and AFSA. The 40,905 square feet space requirements for AFIA and AFSC were applied against the available administrative space at Kelly AFB. Facilities were to be made available after completion of the Weapon Systems Support Center in December 1996 rather than "depot downsizing".

QUESTION: What was the Air Force's beddown plan for these Kirtland tenants when Kelly AFB was a closure candidate? Will you suggest to the Commission that they use your alternate Kirtland plans if Kelly's depot is added to the Commission's list and endorsed for closure?

RESPONSE: No set alternative Air Force beddown plan exists. If Kelly AFB was a closure candidate, we would have revisited the Air Force's beddown plan for the Kirtland AFB realignment.

QUESTION: Since the cost savings that the USAF is claiming are due to personnel eliminations, should we expect the USAF active duty end-strength to show a reduction from 381,900 personnel to 277,100 in FY 2001 to reflect the actualization of the BRAC reported cost savings?

RESPONSE: We are unable to track to the specific end-strength numbers raised in the question. However, the basic premise of the question is valid. Air Force active duty strength will be reduced as a result of implementing BRAC actions. Specifically, with regard to Kirtland AFB, the Air Force proposal identified an active duty manpower savings of 922 active duty positions which will be reduced from overall Air Force end-strength. Other active duty positions move within their missions to their new locations. On the civilian side, the BRAC savings will be used to programmatically define the National Performance Review civilian reductions already levied against the Air Force.

QUESTION: Would you agree that the USAF can follow only one of two options: Claim the recurring savings and reduce the end-strength by 4800; or do not reduce the end-strength by 4800 and do not claim the recurring savings.

RESPONSE: We are unable to track to the specific 4800 end-strength number raised in the question. However, the basic premise of the question is valid; Air Force active duty strength will be reduced as a result of implementing BRAC actions. On the civilian side, the BRAC savings will be used to programmatically define the National Performance Review civilian reductions already levied against the Air Force. Recurring savings are linked to personnel eliminations in the COBRA. The Kirtland AFB realignment recommendation COBRA had 1375 personnel eliminations with a recurring savings of $52.1 million.

We trust this information is useful. A similar letter is being provided to Senator Domenici and Representative Schiff.

Sincerely

STEPHEN D. BULL, III
Colonel, USAF
Chief, Programs and Legislation Division
Office of Legislative Liaison

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950418-010

FROM: O'LEARY, HAZEL R.	TO: DIXON
TITLE: SEC OF ENERGY	TITLE: CHAIRMAN
ORGANIZATION: DEPT OF ENERGY	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: KIRTLAND AFB, SANDIA NAT LAB	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR			
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON		✓	
DIR. COMMUNICATIONS	✓		
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION	✓		
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA	✓		
COMMISSIONER COX	✓		
COMMISSIONER DAVIS	✓		
COMMISSIONER KLING	✓		
COMMISSIONER MONTOYA	✓		
COMMISSIONER ROBLES	✓		
COMMISSIONER STEELE	✓		
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER	✓		
NAVY TEAM LEADER	✓		
AIR FORCE TEAM LEADER	✓		
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER	✓		
DW			

TYPE OF ACTION REQUIRED

✓	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

EXPLAINING EFFECT REALIGNING OF KIRTLAND WILL HAVE ON SANDIA NATIONAL LAB AND DOE AS WHOLE.

Date: 950420	Routing Date: 950418	Date Originated: 950417	Mail Date:

The Secretary of Energy
Washington, DC 20585

April 17, 1995

The Honorable Alan J. Dixon
Chairman, Defense Base Closure
and Realignment Commission
1700 North Moore Street
Arlington, Virginia 22209

Dear Mr. Dixon:

The Department of Energy and the Air Force have long enjoyed a mutually beneficial relationship at Kirtland Air Force Base. However, in February, the Department of Defense announced that Kirtland was identified as a candidate military installation for a major realignment. Prior to the Department of Defense decision to realign Kirtland, the Department of Energy was not contacted for input regarding the impact of such a decision on our activities and operations.

The Department of Energy and Sandia National Laboratories, as major tenants on the Kirtland Air Force Base, are dependent on the Air Force to provide safety, security, and infrastructure support on the Kirtland Air Force Base. These services include security, fire protection, and emergency operations as well as maintenance and operations of roads, utilities, traffic control, and grounds maintenance. The organizations that currently provide those services are proposed to be either relocated to other bases or to be dissolved. This will result in the Department of Energy and Sandia National Laboratories having to assume many of these responsibilities to continue our program. Since that announcement, we have been analyzing the cost and operational impacts of the potential realignment on the Department's operations at the base.

If the proposed realignment is approved, it appears that the Department of Energy and the Sandia National Laboratories would need to establish an operations, safety, and security zone, which comprises a large percentage of the land currently encompassed by the base. With this responsibility would come a requirement for additional funding. We estimate that it would cost the Department of Energy an additional 65 million dollars of one-time costs to acquire or carry through with the Air Force planned capability enhancements needed to continue the current Department of Energy operation on Kirtland Air Force Base. In addition, about 30 million dollars would be required on an annual basis to maintain and continue these operations. We estimate that the cost to the Department of Energy over the next 20 years, expressed in net

present value terms, could be about 440 million dollars. While we are continuing to review our estimates, we are confident these are generally correct. These estimates do not include the capabilities necessary to support the other remaining tenants on the base. We believe the other tenants, both large and small, would be impacted by the Kirtland realignment and would have cost impacts of their own.

In addition to funding issues, we are also concerned about the loss of synergy caused by breaking up nuclear weapons interface activities between the Air Force, the Defense Nuclear Agency, the Department of Energy, and the Sandia National Laboratories. Many activities such as the Department of Energy's Accident Response Group are deployed from Kirtland Air Force Base. This group, which is comprised of the Department of Energy, the Los Alamos National Laboratory, the Sandia National Laboratories, and other Department of Energy organizations, is responsible for responding to any accident involving a nuclear weapon anywhere in the world. None of these problems are insurmountable. However, they are of concern to the Department of Energy and could be expected to result in the unnecessary commitment of resources, which would not be needed under the current base alignment.

Still another concern centers around the Kirtland Underground Munitions Storage Complex. As presently envisioned, this facility would be located in the Department of Energy/Sandia National Laboratories cantonment. With a reduced Air Force presence on the base, it would be uncertain that the Air Force can maintain this facility for the long-term.

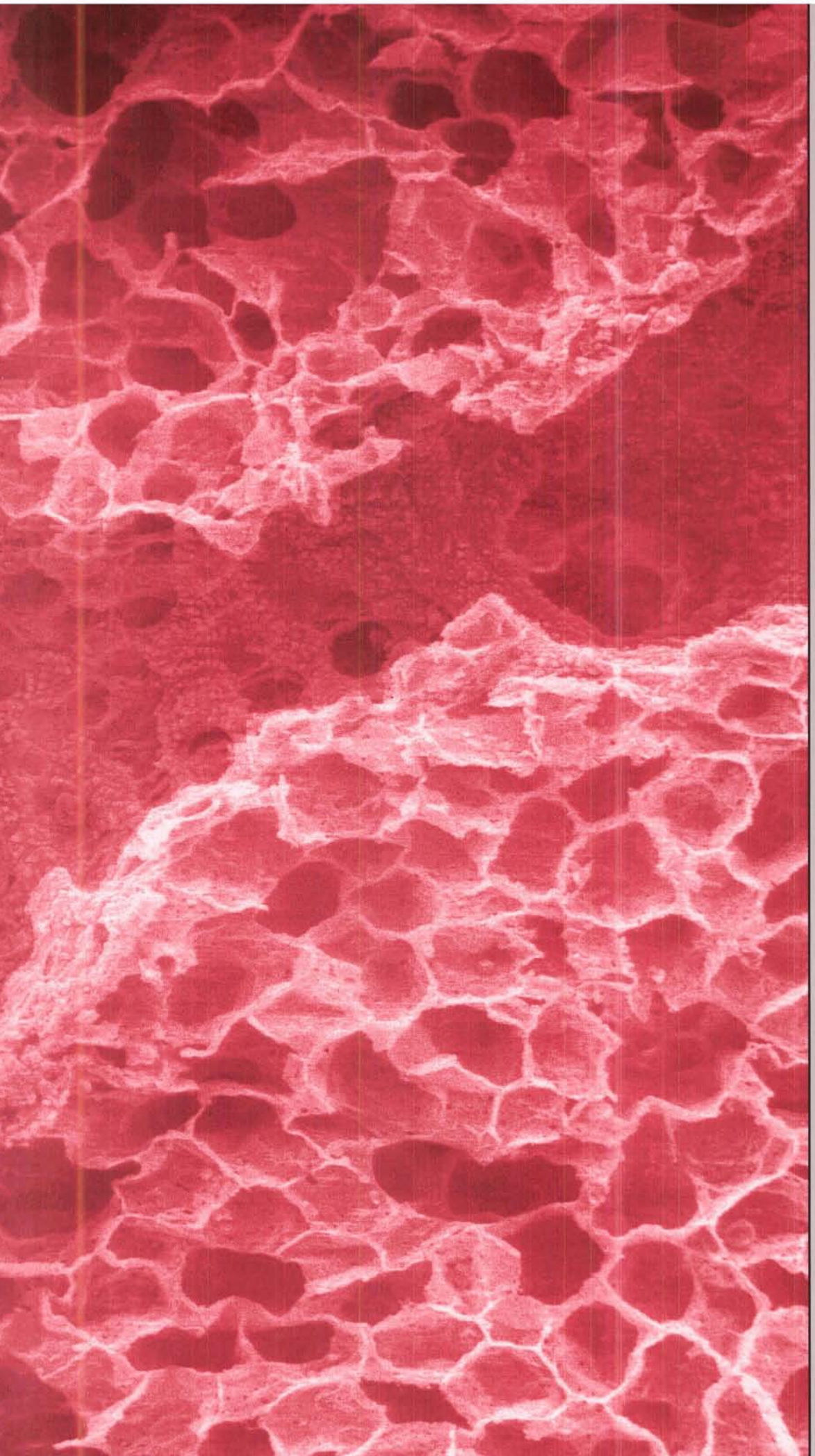
The eastern portion of Kirtland Air Force Base is an area which is currently used by the Department of Energy, the Sandia National Laboratories, and the Air Force Phillips Laboratory for critical program purposes. Use of that land and facilities would not likely change with the reduced Air Force presence. This area has significant hazardous activities that would preclude increased public access to those areas. These hazards include unexploded ordnance, live fire ranges, physics experiments, and areas requiring environmental remediation.

As you proceed with your review of the potential realignment of Kirtland Air Force Base and the public hearings, the Department of Energy is prepared to assist the Defense Base Closure and Realignment Commission to ensure that the overall impact of the proposed action is fully understood before final decisions are made.

Sincerely,

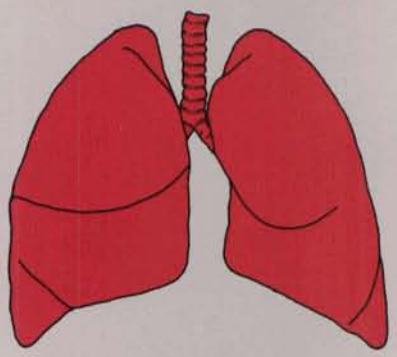
Hazel R. O'Leary

Hazel R. O'Leary



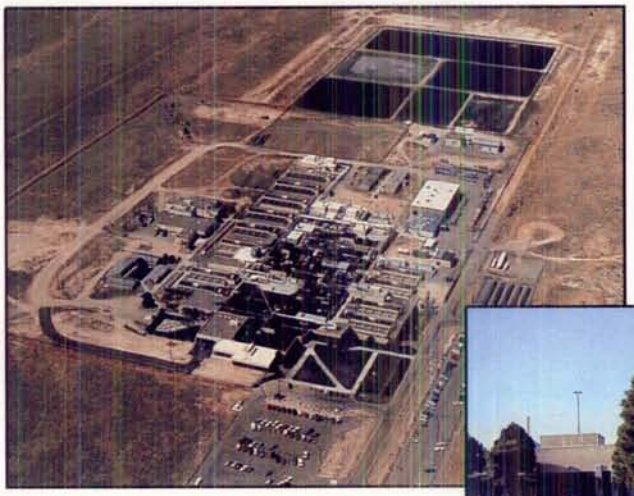
ITRI

INHALATION
TOXICOLOGY
RESEARCH
INSTITUTE



ITRI

The Inhalation Toxicology Research Institute (ITRI, pronounced "I-try") is a Federally Funded Research and Development Center that serves as an international research resource for government and industry. The facilities are owned by the Department of Energy (DOE) and staffed and operated by the private, non-profit Lovelace Biomedical and Environmental Research Institute, Inc., a subsidiary of Albuquerque's Lovelace Medical Foundation.



The Institute began in the early 1960s as a joint effort between the Lovelace organization and the Atomic Energy Commission to assemble a research team for determining the long-term health impact of inhaling radioactive particles. This team and the facilities it occupies have evolved to become a premier center for inhalation toxicology and associated fields. Today, ITRI is broadly recognized for its expertise in aerosol science, toxicology, radiobiology, respiratory tract structure and function, dosimetry and metabolism of inhaled agents, and the pathogenesis of cancerous and non-cancerous respiratory disease.

Mission

ITRI is dedicated to protecting human health by conducting basic and applied research to improve our understanding of the respiratory tract and the health effects that might occur in humans from inhaling airborne toxicants in the home, workplace, or environment. The Institute's tripartite mission includes research, education, and technology transfer. Its primary goals are to conduct high quality, unbiased research and to link laboratory results with epidemiological findings in order to identify, define, and reduce human health risks. The Institute is oriented toward collaborating with other scientists, developing research partnerships with industry for problem solving and technology transfer, and serving the scientific community through advisory roles, leadership in professional societies, and research training.

ITRI fills a unique scientific niche that complements resources in universities, industry, and testing laboratories. The uniqueness of the Institute stems from its combination of diverse and highly qualified staff and its specialized facilities. A hallmark of ITRI is its ability to readily assemble multidisciplinary teams of internationally recognized investigators in order to develop research strategies and address sponsor needs. The ITRI staff serves freely as a resource of information and advice. ITRI is oriented toward building bridges between the biological and physical sciences, basic and applied research, animal and human research, and hazard identification and risk assessment. ITRI

management and staff place high value on communicating, collaborating, and integrating study results into the broader context of solving problems and minimizing health risks.

No classified research is conducted at the Institute, and the staff is oriented toward rapid publication of research results; however, confidentiality is maintained to suit sponsor needs.

Unique Scientific Strengths

The breadth of ITRI's capability for integrative research is unmatched in the field of inhalation toxicology and pulmonary disease research. At ITRI, a broad spectrum of clinical and bioassay capabilities coexists with capabilities for working with innocuous and hazardous materials of all types, expertise in evaluating airborne materials, dosimetry and toxicokinetics, health effects from the molecular level to the intact individual, and risk assessment.

Some of ITRI's most broadly recognized scientific strengths include:

Basic aerosol science, air sampling technology and monitoring strategies, evaluation of the generation of airborne materials from environmental sources, industrial processes, and waste handling.

Generation and delivery of aerosols, gases, and vapors for experimental and medical applications, and for testing and demonstration of instrumentation.

Novel and conventional methods for acute to chronic inhalation exposures of all laboratory animals to all physical forms of hazardous and nonhazardous chemicals and radionuclides, including the use of chemical and radioactive tracers.

Routine and novel clinical evaluation and treatment of laboratory animals by procedures applied in human clinical medicine, including clinical

pathology, cardiorespiratory physiology, immunology, x-ray and gamma imaging, bronchopulmonary lavage and endoscopy, and cellular and molecular assays.

A genetically defined dog colony with an ongoing breeding program, multigeneration capability, and broad age availability.

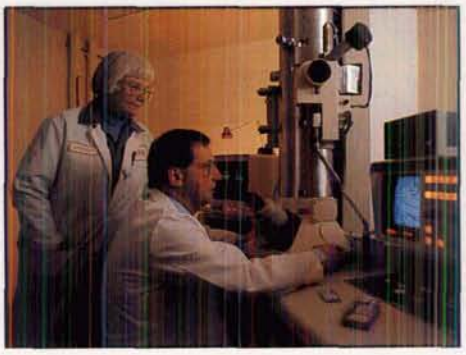
Dosimetry and toxicokinetics of chemical and radioactive agents using tissue and fluid sampling, metabolic collections, radiotracer

ITRI

studies, extensive analytical and radioanalytical capability, and computer modeling and simulation.

Cellular and molecular biology of cancerous and noncancerous responses, including access to animal and human tissues, tissue culture and banking capability, cytotoxicity and transformation assays, transplant and repopulation studies, and routine and novel molecular biology approaches for relating gene alterations to disease development.

Experimental pathology, including necropsy, microdissection and cell isolation, routine and special fixation techniques, qualitative and morphometric light and electron microscopy, slide preparation with routine and special stains, histochemistry, immunohistochemistry, autoradiography, and in situ hybridization.



Commitment to quality assurance and quality control with incorporation of Good Laboratory Practices (GLP) principles in all studies and the capability for full GLP compliance as required.

Staff

The approximately 180 full-time employees of ITRI include a research staff of about 30 principal investigators and 60 technicians who encompass a broad range of disciplines and experience including aerosol science, chemistry, toxicology, cellular and molecular biology, radiobiology, pathology, veterinary medicine, biomathematics, and risk assessment. The research is supported by an animal care staff of approximately 20 and the full range of administrative support staff. The hallmarks of the staff are its diversity, qualifications, motivation and productivity, orientation toward excellence, readiness to communicate and collaborate, and culture of teamwork that not only crosses disciplinary lines, but also bridges between the research and support staff.

The combined professional expertise and outstanding individual qualifications of the ITRI staff constitute a remarkable resource. ITRI scientists are highly visible in the scientific mainstream and have a strong reputation for scientific credibility. They hold over 50 positions on national and international advisory boards, review panels, and study sections, 15 positions as scientific editors or on editorial boards of scientific journals, and numerous offices in leading professional scientific societies.

Professional certifications include the American Board of Toxicology (6), American Board of Veterinary Toxicology, American College of Pathologists, American College of Veterinary Pathologists (3), American Board of Health Physics (2), American Board of Industrial Hygiene, American Academy of Microbiology, and American College of Laboratory Animal Medicine. Most ITRI researchers have at least one academic appointment and are active lecturers and graduate and postdoctoral mentors.

Facilities

ITRI encompasses 290,000 square feet of laboratory, office, animal housing, clinical, and research support space with a replacement value of over $62M and containing capital equipment valued at over $14M. The Institute is located on a 40-acre site near Albuquerque, NM. These resources include:

State-of-the-art facilities for the housing, care, and breeding of over 1000 dogs, 10,000 rodents, and other species of all sizes.

Inhalation exposure facilities for acute to life-span exposures of all species by whole-body, nose-only, or intra-airway routes to innocuous, hazardous, and radioactive airborne materials in all physical forms, including single agents and mixtures such as tobacco smoke and engine exhaust.

Specialized aerosol laboratories supporting inhalation studies, basic and applied laboratory research, and field studies, including environmental chambers, wind tunnels, exhaust dilution tunnels, and respiratory tract casts and models.

A well-equipped veterinary clinic for examination and treatment of animals, including clinical chemistry and microbiology laboratories, x-ray and gamma imaging, surgery, respiratory physiology, electrocardiology, electroencephalography, and bronchoscopy.

High-capacity necropsy and histopathology laboratories, light and electron microscope suites, and facilities for video imaging and image analysis.

Cellular and molecular biology laboratories with capability for tissue and cell collection and banking, flow cytometry, cell and tissue culture, and tumor transplantation. DNA, RNA, and protein

evaluations, including gel and capillary electrophoresis, PCR, DNA adduct analysis, fluorescent microscopy, and immunocytochemistry.

Analytical organic and inorganic chemistry and radiochemistry laboratories.

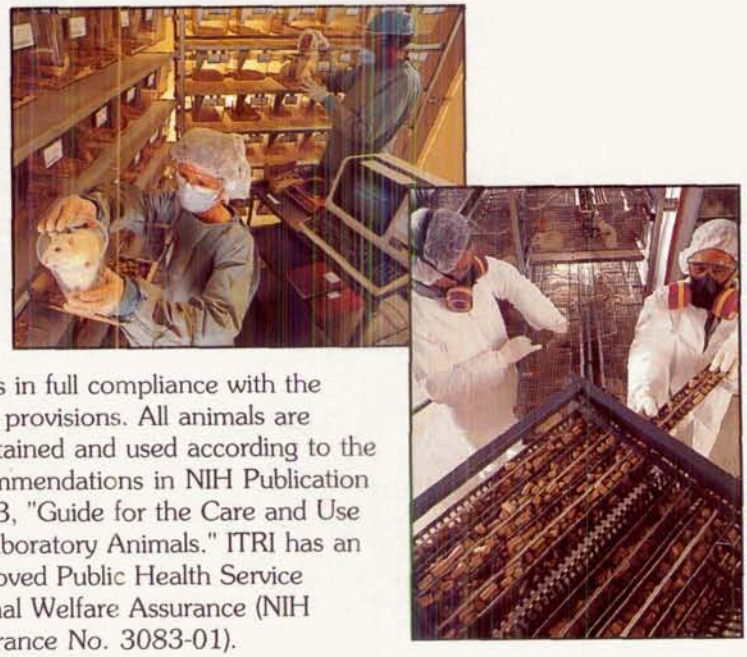
Facilities and procedures for the safe collection, segregation, packaging, and temporary storage of all research-generated chemical and radioactive wastes in compliance with DOE, EPA, and state regulations, and for onsite disposal of uncontaminated biological wastes.

Quality assurance facilities including data and experimental sample archives and instrumentation calibration laboratories with traceable standards.

An extensive research library containing 280 journal subscriptions, 10,500 bound journals, 10,000 books, and 20,000 documents, with full on-line search capability.

ITRI

Animal Care and Use



ITRI management and staff are deeply committed to the humane care and proper use of laboratory animals. All protocols involving animals are reviewed and approved by the Institute's Animal Research Committee, composed of staff at all levels and a non-employee community member.

The Institute has maintained full accreditation by the American Association for the Accreditation of Laboratory Animal Care since 1971, is registered under the Animal Welfare Act (Reg. No. 85-R-003), and is in full compliance with the Act's provisions. All animals are maintained and used according to the recommendations in NIH Publication 85-23, "Guide for the Care and Use of Laboratory Animals." ITRI has an approved Public Health Service Animal Welfare Assurance (NIH Assurance No. 3083-01).

Quality Assurance

ITRI holds an excellent reputation for scientific integrity and for the quality of its research and the resulting publications, and presentations. The Quality Assurance (QA) Unit, reporting to the Director, administers a comprehensive site-wide QA program, integrating a culture of quality into research and support operations alike. All studies are conducted in the spirit of Good Laboratory Practices (GLP) and in strict accordance with FDA or EPA GLP regulations as required. All research is conducted under approved, rigorously reviewed protocols. Standard operating procedures and calibration logs are in place. Research and results are recorded using standardized notebooks, forms, and electronic media, and both data and experimental samples are archived as needed. The QA Unit conducts critical phase inspections, data audits, and report audits according to a QA plan developed for each study.

Stewardship of the Environment and Human Safety

Safeguarding the safety and health of staff and avoiding adverse impacts on the environment are top priorities at ITRI. The Health Protection Operations (HPO) Unit, reporting to the Director, provides direction and oversight to ensure that research and support activities are in compliance with applicable regulations and good practices. The HPO Unit maintains progressive programs in health physics, industrial hygiene, environmental compliance, laboratory safety, and emergency preparedness to meet requirements of DOE, OSHA, state, and local regulations. Located 10 miles from the nearest residential area, and isolated from other non-residential facilities, ITRI presents no offsite contamination hazards. Hazardous and radioactive wastes are managed according to RCRA and DOE regulations. All hazardous wastes are shipped offsite to EPA-permitted disposal facilities. ITRI participates actively in the DOE Environmental Restoration and Waste Management Five-Year Plan, ensuring identification and remediation of contaminated sites and safe management of current waste streams.

Educational Programs

ITRI takes pride in its broad involvement in education and serves as a key national research training resource. Long a Lovelace tradition, education is now also a DOE mission, lending a strong element of academia to the ITRI culture. Educational programs are aimed at all levels, from elementary school to senior scientists. Individuals and organizations interested in ITRI educational programs are encouraged to contact the Institute.

ITRI has a long reputation for the high quality of its summer research internship programs which engage participants as true co-investigators in studies from experimental design to reporting of results. Over 570 individuals have participated in summer programs aimed at minority high school students, undergraduate university students, and secondary school science and math teachers.

With the University of New Mexico (UNM) College of Pharmacy, ITRI conducts a doctoral-granting graduate program in inhalation toxicology that is funded by the Lovelace-Anderson Endowment Foundation, the DOE, and industry sponsors. The combined ITRI-UNM toxicology programs constitute one of the larger toxicology graduate training centers in the US. Students entering with bachelors, masters, and professional degrees conduct research at ITRI in selected areas of focus and complete coursework at UNM.

ITRI is also active in postgraduate training. Postdoctoral fellowships are offered in all of the Institute's scientific disciplines. The Institute also hosts pulmonary fellows for research training and visiting scientists on sabbatical leave or other temporary collaborative or training assignments.

Opportunities for Research Sponsorship

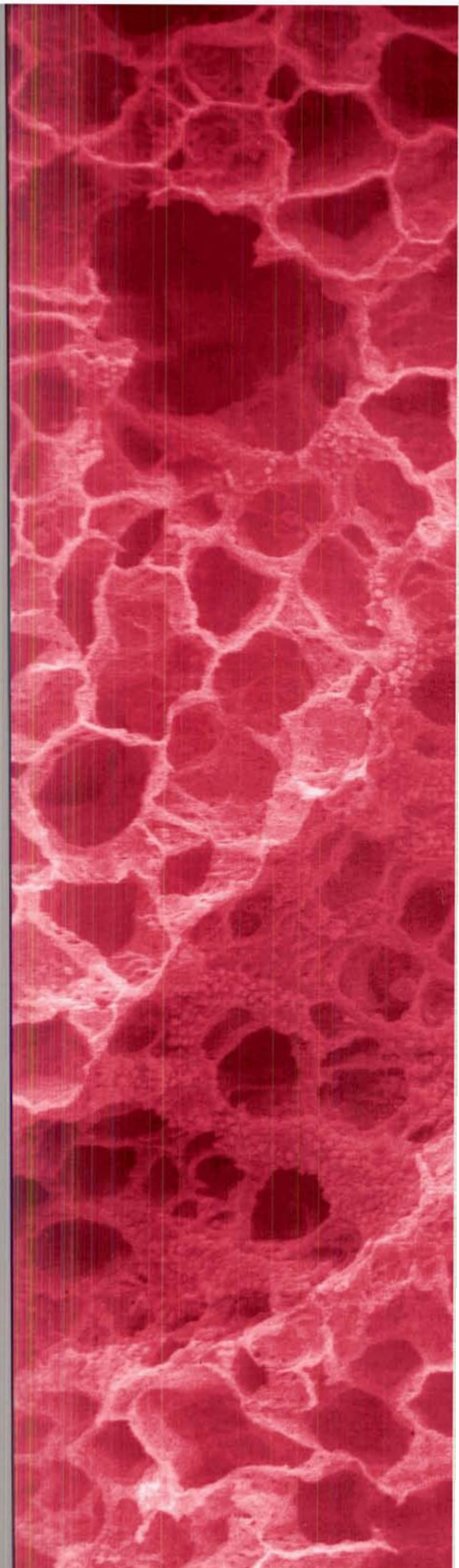
As a Federally Funded Research and Development Center (FFRDC), ITRI is available to conduct research for all government and industry sponsors. Although the largest single sponsor is DOE, ITRI research is funded by other agencies, private industry, and industry and government-industry consortia. Non-DOE government sponsors fund ITRI research through interagency agreements and grants, while non-government sponsors fund research through contracts and Cooperative Research and Development Agreements (CRADAs). FFRDCs are not allowed to submit bids or respond competitively to Requests for Proposals (RFPs), but may respond to Requests for Applications (RFAs) or to sole-source inquiries. ITRI collaborates in research under grants and contracts with other institutions through subcontracts. We invite inquiries about research needs.

ITRI

JOE L. MAUDERLY, D. V. M.
Director
Inhalation Toxicology Research Institute

President
Lovelace Biomedical and Environmental Research Institute, Inc.

Office: 505-845-1169



Inhalation Toxicology Research Institute
Lovelace Biomedical and Environmental Institute, Inc.
P.O. Box 5890 Albuquerque, NM 87185
505-845-1037 Fax 505-845-1198

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under Contract No. DE-AC04-76EV01013
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ITRI

INHALATION TOXICOLOGY RESEARCH INSTITUTE

LOVELACE BIOMEDICAL AND ENVIRONMENTAL RESEARCH INSTITUTE, INC.
P.O. Box 5890 • Albuquerque, NM 87185 • (505) 845-1037 • FAX (505) 845-1198

April 3, 1995

Honorable Alan J. Dixon
Defense Base Closure and
Realignment Committee
1700 N. Moore Street
Suite 1425
Arlington, VA 22209

Dear Mr. Dixon:

The Inhalation Toxicology Research Institute (ITRI) is a laboratory operated by the Lovelace Biomedical and Environmental Research Institute (LBERI) for the U. S. Department of Energy under Contract No. DE-AC04-76EV01013. This facility is located in the southern portion of Kirtland Air Force Base (KAFB) in Albuquerque, NM. We have about 190 employees and a total FY-1995 budget of about $16,000,000. Our mission is to conduct basic and applied research on the human health effects of inhaling airborne toxicants in the workplace, home or environment. While DOE funds most of the Institute's research, we also conduct research for DOD and a range of other Federal sponsors.

Like other non-Air Force KAFB tenants, we are very concerned about the adverse effects the proposed realignment of KAFB will have on the Institute, and the lack of overall cost-effectiveness of realigning the Base. Our major concern is the anticipated cost increase to ITRI, and thus to DOE, for a wide range of support services currently provided through the Air Force. These services must be continued irrespective of the presence of the Air Force; thus, the withdrawal of the Air Force will shift costs to other tenants and cause a sharing of costs among a smaller number of Federal activities.

The shared services of concern include normal infrastructure such as fire protection, road maintenance, and utility system operation and maintenance. Security is an additional key element. ITRI, as well as several other KAFB tenants, share with the Air Force a need for area security, now provided as perimeter security by the Air Force. While ITRI does not currently conduct classified research, some of our work involves laboratory animals. Location within the KAFB perimeter provides a buffer between ITRI's tax-supported activities and the vandalism, break-ins, and arson that have occurred in unprotected sites as a result of the accessibility to extremist groups. In this vein, it should not go without consideration that limitation of public access to significant portions of KAFB is also required because tracts have not been thoroughly purged of hazardous or explosive materials left from DOD activities over the years. Finally, the availability of the Air Force Explosive Ordnance Disposal Flight is an asset to all activities on KAFB for dealing with not only the historic residue of DOD activities, but the occasional unstable chemical waste.

Courier Address:
Bldg. 9217, Area Y, KAFB East
Albuquerque, NM 87115

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Contract DE-AC04-76EV01013
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We question whether the Committee thoroughly considered the above needs in view of the overall costs of operating the diverse activities located on KAFB. In its recommendation to realign the Air Force activities, the Committee surely felt that cost savings could be achieved in Air Force Operations; however, it is the total cost of both the Air Force and non-Air Force activities that will continue either at KAFB or elsewhere that incurs the burden on the Federal budget, and ultimately the taxpayer. From the viewpoint of overall cost effectiveness, one can make a solid case for grouping together the most Federally-funded activities possible, which require similar infrastructure support, at a common location. In the case of KAFB, the Air Force and non-Air Force activities are quite compatible and have many shared support needs. Because the realignment scenario moves Air Force activities, but does not actually "close" the KAFB complex, it can be predicted that the overall effect would be to increase, rather than decrease, the burden to the budget.

In summary, we are very concerned about the adverse budgetary impact of the proposed realignment of KAFB. While it would be easy for us to be concerned simply because costs to ITRI would certainly increase, it is more important for the decision to be approached with a view of its broader impact. I would be pleased to provide additional information or to discuss the above issues if that would better inform the decision-making process (Telephone: 505-845-1169, FAX: 505-845-1193).

Sincerely,

Joe L. Mauderly, D.V.M.
President, LBERI
Director, ITRI

JLM:CHH:mm

xc: Ms Kathleen A. Carlson, DOE/KAO
Dr. David J. Ottensmeyer, TLI

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950321-15

FROM: BINGAMAN, JEFF	TO: CARMAN, CE CF
TITLE: SENATOR (NM)	TITLE: DIR, CONG. LIAISON
ORGANIZATION: U.S. CONGRES	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: KIRTLAND AFB	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL				COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR./CONGRESSIONAL LIAISON		(✓)		COMMISSIONER STEELE			
DIR./COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXECUTIVE SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER		X	
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
				DK	✓	SOLD PAPER	
DIR./INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

(✓)	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING COPY OF RESPONSE CONCERNING AIR QUALITY ISSUES THAT THE AIR FORCE IDENTIFIED AS A DETERMINING FACTOR IN THE RE-ALIGNMENT OF KIRTLAND.

Due Date:	Routing Date:	Date Originated:	Mail Date:

FAX COVER SHEET

Please refer to this number when responding 95-0321-15

Office of Senator Jeff Bingaman
703 Hart Senate Office Building Washington, D.C. 20510

TO: CeCe Carman
OFFICE: BRAC

FROM: Joanne Ouillette
OFFICE: Office of Senator Jeff Bingaman
United States Senate
Washington, DC 20510

PAGES: , total (including cover sheet)

Comments...

Response we received from the state regarding the air quality issues that the Air Force has identified as a determining factor in realignment of Kirtland. The info has also been sent to GAO.

Sending to fax number: (703) 696-0550

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 20, 1995

The Honorable Jeff Bingaman
United States Senate
110 Hart Senate Office Building
Washington, D.C. 20810

SUBJECT: AIR QUALITY ISSUES RELATED TO DEPARTMENT OF DEFENSE BASE CLOSURE AND REALIGNMENT ACTIONS AFFECTING KIRTLAND AIR FORCE BASE.

Dear Senator Bingaman:

This letter responds to your correspondence dated March 16, 1995 concerning recently released recommendations of the Department of Defense Base Closure and Realignment (BRAC) affecting Kirtland Air Force Base (AFB). We were surprised to learn that air quality has been cited as a negative determining factor regarding the ability to receive additional personnel at Kirtland AFB. I hope the following responses will be helpful in understanding air quality issues related to BRAC actions affecting Kirtland Air Force Base. The questions in your letter are repeated and answered in the order presented in your March 16 letter.

QUESTION 1:

"What is the current status of Albuquerque's air quality with respect to the Clean Air Act requirements?"

RESPONSE:

Bernalillo County, which encompasses Albuquerque, is currently designated as low-moderate (less than 12.7 parts per million for an eight-hour average) nonattainment for carbon monoxide. Three consecutive years have been completed without any violations of the carbon monoxide standards established by the Clean Air Act.

Efforts are currently in progress to have Bernalillo County redesignated to attainment/maintenance status for carbon monoxide. Legal notice for a hearing regarding this redesignation has been advertised for April 13, 1995 before the Albuquerque/Bernalillo County Air Quality Control Board. After consideration and approval by the Air Quality Control Board, the request will be forwarded to the Governor for formal submittal to the Environmental Protection Agency. Action by the Environmental Protection Agency is anticipated by July 15, 1995.

Recent Environmental Protection Agency documentation indicates that the Los Angeles/Long Beach area is classified as severe nonattainment for carbon monoxide, and is the only airshed in the United States classified as extreme nonattainment for ozone. Without more detailed information, we cannot provide specifics regarding the Los Angeles Air Force Base circumstances.

QUESTION 2:

"Was the Albuquerque Environmental Health Department consulted during the Air Force BRAC Analysis to determine whether transferring additional personnel from other closed or realigned bases to Kirtland AFB would adversely impact the air quality in Albuquerque and Bernalillo County?"

RESPONSE:

We have had several general discussions during the last eight months with Kirtland AFB staff regarding the ability of Kirtland AFB to expand in terms of facilities and personnel. Many of the discussions evolved out of the local adoption of "General Conformity" regulations. In addition, general information regarding the air quality attainment status of Bernalillo County was provided approximately a year ago, however, we were not consulted regarding any specific BRAC closures or realignment proposals.

During our discussions, we have indicated that we are unaware of any major air quality impediments which would prohibit the ability for substantial growth of employment at Kirtland AFB to occur. Our general conclusion is that Albuquerque is in an extremely good position to accept additional growth while still satisfying all Clean Air Act requirements. (Please see attached letter to Kirtland AFB dated March 10, 1995.)

QUESTION 3:

"Does your department have a model for determining compliance conformity with Clean Air Act requirements with respect to the expansion of federal facilities in Albuquerque?"

RESPONSE:

The basic framework guiding compliance conformity comes from federal regulations commonly referred to as "General Conformity" and "Transportation Conformity". Regulations for both were promulgated in November, 1993. As required by the federal regulations, local versions of the conformity requirements were approved by the Air Quality Control Board on November 9, 1994. General Conformity is considered most important in terms of expanding federal operations. A copy of Air Quality Control Board Regulation No. 43 is attached.

General Conformity rules set specific thresholds of pollutants that apply to federal actions. The carbon monoxide threshold of 100 tons is applicable to nonattainment and maintenance areas. If a federal action will produce 100 tons or more of carbon monoxide, as determined through a specific applicability analysis, then more detailed site specific analyses using modelling techniques become necessary. The primary computer model used in Albuquerque for carbon monoxide is CAL3QHC. This is a public domain model approved by the Environmental Protection Agency for analysis of critical roadway intersections. A second model, MOBILE 5a, provides vehicle emissions inputs for the CAL3QHC model.

QUESTION 4:

"If an analysis of a proposed expansion did indicate adverse impacts to air quality, would that preclude the expansion from occurring? If not, what measures could be taken to bring the proposed expansion into compliance with Clean Air Act requirements?"

RESPONSE:

In the Albuquerque area, it is becoming highly unusual for computer modelling efforts to reveal potential exceedences of the National Ambient Air Quality Standards. Much of this can be attributed to the trend toward cleaner vehicles, which is expected to continue. In rare cases where site specific violations might be predicted, measures can be taken to alleviate traffic congestion and high carbon monoxide levels. By appropriate mitigation of possible adverse impacts, expansion of Kirtland AFB would not be precluded.

Federal facilities such as Kirtland AFB are in an extremely advantageous position to mitigate any possible carbon monoxide problems associated with vehicle travel and traffic congestion. Federal entities are capable of implementing a vast array of travel demand management strategies to help reduce vehicle-related carbon monoxide pollution. Measures might include express buses, transit pass programs, employee transportation program coordinators, enhanced car or van pooling, alternative work hours, and telecommuting. Support services such as banks, restaurants, and cafeterias can also be implemented to help reduce vehicle miles of travel. Strategic roadway facility improvements are also possible to eliminate vehicle congestion. State of the art vehicle monitoring may be adaptable to help improve the flow of traffic at Kirtland AFB entrances. In contrast to the roadways elsewhere in Albuquerque, all vehicles accessing Kirtland AFB currently are required to undergo vehicle emissions inspection to operate on the base.

QUESTION 5:

"Has the Air Force consulted with your office regarding any expansion activities concerning Kirtland AFB in the last two years? If so, what were your department's conclusion?"

RESPONSE:

The Air Force consulted the City's Environmental Health Department during early March of 1994 regarding expansion of activities and employment at Kirtland AFB. A specific expansion proposal involved the Phillips Laboratories. Approximately 600 new jobs were proposed. An analysis prepared consistent with federal General Conformity regulations indicated that the expansion would not reach the 100 ton threshold. A summary of our response is attached. No conflicts with air quality control regulations were identified.

As we recently indicated to Kirtland AFB, substantial population and employment growth is factored into the City's most current emissions inventory and emissions budget for Bernalillo County. Approximately 50,000 new jobs are forecast to occur in the next ten years. We see no restrictions which would prohibit Kirtland AFB from expanding and taking advantage of this growth potential. Additional jobs beyond the 50,000 can also be accommodated. As with federal actions across the nation, project specific analyses must be undertaken by the implementing agency to demonstrate compliance with Clean Air Act requirements. The City of Albuquerque Environmental Health Department looks forward to working with Kirtland Air Force Base to evaluate any projects that might be proposed.

Even if a specific expansion proposal reaches or exceeds the 100 ton threshold for carbon monoxide, that action may go forward with appropriate modelling at the site specific level to demonstrate a lack of violations of standards. If problems are shown by the modelling, the option exists to apply mitigative strategies where necessary. In contrast, actions proposed for ozone nonattainment areas are required to reduce the amount of ozone produced to zero (if the 100 ton threshold for ozone is reached). Achieving no net increase in pollution for ozone nonattainment areas such as Los Angeles can, in our opinion, be extremely difficult.

In summary, our most recent analyses prepared as part of the redesignation request and accompanying plan for maintenance of attainment indicates that Bernalillo County, which includes Kirtland AFB, has capacity for significant employment growth. The City of Albuquerque has not identified any significant obstacles relating to air quality concerns that would inhibit the expansion of Kirtland AFB.

If you have questions or need additional information, please let me know.

Sincerely,

Sarah B. Kotchian

Sarah B. Kotchian
Director
Environmental Health Department

Enclosures

cc: Mayor Martin Chavez
Lawrence Rael, Chief Administrative Officer

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 10, 1995

Mr. Walter S. Darr III
Chief of Compliance
Kirtland Air Force Base
2000 Wyoming Boulevard
Albuquerque, N.M. 87117-5669

SUBJECT: FUTURE GROWTH FOR ALBUQUERQUE AND BERNALILLO COUNTY; AIR QUALITY CONSIDERATIONS.

Dear Mr. Darr:

The purpose of this letter is to advise you that our recent emission inventory analyses prepared for a currently proposed State Implementation Plan Revision for Bernalillo County shows that substantial population and employment growth will be feasible without exceeding the air pollution emission inventory budget for this area.

By the Year 2005, a review of the socioeconomic projections specifically identifies the opportunity for Kirtland Air Force Base to increase employment consistent with growth projections for the Urban Area. We feel room exists within our budget to accommodate substantial growth by Kirtland Air Force Base. Additional Kirtland Air Force Base growth beyond the assumed population and employment projections is also considered feasible. We welcome the opportunity to examine specific strategies to accomplish this growth.

Approximately 50,000 jobs are already projected for the Albuquerque area in the next ten years.

Please contact us for more detailed information.

Sincerely,

for Lawrence Rael
Chief Administrative Officer

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103
ENVIRONMENTAL HEALTH DEPARTMENT

March 11, 1994

Michelle Hedrick, Chief
PL/SE
3550 Aberdeen Ave
Kirtland AFB, NM 87117-5776

SUBJECT: FINAL COMMENTS RELATING TO CLEAN AIR ACT CONFORMITY ANALYSIS FOR PROPOSED AIR FORCE SPACE TEST AND EXPERIMENTATION PROGRAM OFFICE RELOCATION.

Dear Ms. Hedrick:

Thank you for the opportunity to review the Draft Clean Air Act Conformity Analysis for the proposed Air Force Space Test and Experimentation Program Office relocation. We concur with the generally conservative approach you have taken in this analysis, including the MRGCOG no-build projections and the assumption that all 625 positions would be true relocations. After considerable review of the analysis, we agree with the findings of the conformity analysis that the proposed Phillips Labs expansion involving approximately 625 workers does not exceed the General Conformity de minimis values currently identified by the Environmental Protection Agency.

We appreciate your attempts to address our comments and concerns in the development of the conformity documentation. In particular, we are pleased with your willingness to pursue implementation of measures to help reduce carbon monoxide emissions related to the proposed action. We are pleased to know that you will inform us later regarding the ultimate progress on various strategies intended to help minimize carbon monoxide emissions.

Although there were apparent complications in making the full draft environmental assessment and finding of no significant impact (FONSI) documents available to assist in our evaluation, you did attempt to relay the pertinent details of that assessment as they concern the conformity review. We recognize your need to complete the conformity analysis by the March 15, 1994 suspense date in order to take advantage of the grandfathering provisions relating to such actions. Due to these time constraints, many of our comments were discussed verbally at our meetings of March 4th, 8th, 9th, and 10th, as well as in numerous telephone conversations.

MS. MICHELLE HEDRICK
MARCH 11, 1994
PAGE TWO

In our most recent conversation, earlier today, we arrived at a consensus that the proposed lab expansion would result in yearly emissions of approximately 85 tons of carbon monoxide. Independently, using a variety of analytical approaches, we have confirmed that this value is a reasonable estimate of emissions during the maximum period of activity. In this case, the 85 tons represent the year 1997 when the additional 625 new employees would be present. Other years are expected to have lower emissions.

After March 15, 1994, the more formal procedures including public participation, in-depth agency consultation, technical modeling, and documentation will be required for all Federal actions which are not exempted. Clearly, many of these future actions will need to perform modeling analyses of possible localized carbon monoxide problem areas (e.g. "hot spots"). We look forward to working closely with Kirtland Air Force Base and the various tenants to ensure that all future actions satisfy the newly established conformity procedures.

Thank you for your interest in clean air in Bernalillo County. If you have any questions or need additional information, please contact me at 768-2600.

Sincerely,

Steven W. Walker, Manager
Air Pollution Control Division

cc: Michelle Hedrick, Phillips Laboratory
Darren Cochran, First Lieutenant, USAF
Walter S. Darr, Chief, Compliance, KAFB
Sarah B. Kotchian, Director, Environmental Health Dept.
Alana Eager, Supervisor, Environmental Health Dept.
Dan Warren, Planner, Environmental Health Dept.
Glen Dennis, Environmental Health Scientist, Environmental Health Dept.

SW:GLD/DJW:djw940303c

Document Separator

Base Realignment and Closure Air Quality Analysis Process

- KAFB questionnaire data concluded: Air Quality: YELLOW+
  -- Attainment: YELLOW; Restriction: GREEN; Future Growth: YELLOW
- Air quality analysis procedures for proposed scenarios in nonattainment/maintenance areas
  -- EPA currently has no conformity rule for attainment/unclassified areas
    --- Therefore, no air quality analysis was performed for proposals in these areas
  -- Analysis used the Air Conformity Applicability Model for emission calculations
    --- Step 1: Are emissions from proposed BRAC action above de minimis threshold
      ---- No: Conformity rule satisfied - are the emissions "regionally significant"
      ---- Yes: Positive conformity must be demonstrated: Proceed to Step 3
    --- Step 2: Are the emissions regionally significant: Regionally significant if potential emissions are 10 percent or more of an area's total emissions of a criteria pollutant
      ---- No: Conformity rule satisfied - air quality should not hinder action
      ---- Yes: Positive conformity must be demonstrated - Proceed to Step 3
    --- Step 3: Assess probability of proposed action achieving a positive conformity analysis
      ---- Compare 1990 emission baseline with net emissions from projected 1997 operations and BRAC action
        ----- GREEN: Projected Emissions are Less Than or Equal to the 1990 Baseline
        ----- YELLOW: Projected Emissions are Within Moderate Range of the 1990 Baseline
        ----- RED: Projected Emissions are Significantly Greater Than the 1990 Baseline
- Brief BCEG on assessment of air quality issues associated with a proposed action

Results from Preliminary Conformity Analysis of BCEG Scenarios

- Add Scott Communications Center (635 Personnel)
  -- Conformity Determination will be Required
  -- Status YELLOW
    --- BCEG Emissions are Within Moderate Range of the 1990 Baseline
- Add LA AFB with Norton AFB (2600 Personnel)
  -- Conformity Determination will be Required
  -- Status RED
    --- BCEG Emissions are Significantly Greater Than 1990 Baseline

(Capt Roop/CEVC/73360/3/16/95)

Point Paper
on
Kirtland AFB (KAFB) Air Quality

Kirtland Air Force Base Air Quality Status (During BRAC Review Process)

- KAFB is located in the Albuquerque/Bernalillo Air Quality Control Region (AQCR)
  -- The AQCR is in moderate nonattainment for carbon monoxide (CO)
    --- The AQCR has experienced three years of no emission violations for CO - Petitioning the EPA to reclassify the area from nonattainment to maintenance
      ---- Reclassification does not eliminate Conformity Analysis requirements
- Major sources of air emissions are Phillips Laboratory, 58th Special Operations Wing, New Mexico Air National Guard, DOE (Sandia National Laboratory), motor vehicle emissions and transient aircraft
  -- CO emission inventory suggests 97% of emissions come from automobiles
    --- 40% of that figure is from DOE/SNL automobiles transiting KAFB
      ---- Major source for criteria pollutants, but not Hazardous Air Pollutants

Kirtland Air Force Base Air Quality Status (Post BRAC Review Process)

- State Implementation Plan (SIP) with emission budget baseline approved on 13 March 1995
  -- Emission budgets are the portions of the SIP's projected emissions inventory that describe the levels of emission growth for an area
  -- SIP established 1993 emission levels as baseline
  -- SIP emission budget does not provide growth specifically for KAFB
  -- Emission budget is controlled by the AQCR to distribute between competing interests
    --- KAFB, Sandia Lab, Philips Lab, Motorola, and other industrial facilities
- KAFB performed a generic conformity analysis in February 1995
  -- Concluded KAFB has 20% growth potential for CO emissions over the next ten years
    --- Conclusion based on MOBILE5a motor vehicle emission factors that predict a 25% reduction in emissions from motor vehicles will occur by 2005. Because motor vehicles contribute a majority of the CO emissions at KAFB, the 25% reduction in individual vehicle emissions outweighs the 20% increase in growth
      ---- The claim of growth potential is solely based on the MOBILE5a modeling assumption that vehicle use decreases by 25% over the next ten years
      ---- KAFB officials predict a growth in CO emissions, due to current operations, of 40 tons per year over 1994 levels
- Air emission control programs resulted in cleaner air and potential emission growth
  -- Fuel enhancements, compressed natural gas vehicles, and voluntary no drive nights

(Capt Roop/CEVC/73360/3/16/95)

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Headquarters United States Air Force
AF/CEVC
Compliance Division

FACSIMILE TRANSMITTAL SHEET

DATE: 16-Mar-95

SUBJECT: **Clean Air Act General Conformity Rule**

TO: **Frank Cantwell**

FACSIMILE NO: 969-0550

FROM: HQ USAF/CEVC
Captain Jon A. Roop DSN: 227-3360
COMM: 703-697-3360 FAX: 227-3378

TOTAL PAGES INCLUDING COVER SHEET: 7

REMARKS:

Frank,

Attached please find the coordinated LL response to Senator Boxer, and background information on conformity. I'm available to discuss any questions at your convenience.

[redacted] Edwards 1. on

SAFLLP/MAJOR MITTERMEYER/CFM/77950/23 JAN 95
moyer/env95/edwardsBOX

SAF/LLP
1160 Air Force Pentagon
Washington, DC 20330-1160

FEB 09 1995

The Honorable Barbara Boxer
United States Senate
Washington, DC 20510

Dear Senator Boxer

This is in response to your joint letter of December 22, 1994, with Senator Feinstein to the Secretary of the Air Force concerning Clean Air Act nonattainment areas.

The Air Force, like all other Federal agencies, is subject to a general conformity determination as specified in Section 176(c) [42 USC 7506c] of the Clean Air Act Amendments of 1990. The determination is made in accordance with the final rule of the United States Environmental Protection Agency (EPA), Determining Conformity *of General Federal Actions to State or Federal Implementation Plans* as published in the *Federal Register* on November 30, 1994. The final rule (40 CFR 93, Subpart B) was effective January 31, 1994. The State or Federal Implementation Plans provide for execution, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS), and include emission limitations and control measures to attain and maintain the NAAQSs.

The NAAQSs were established by the EPA for six criteria pollutants: ozone (O_3); carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); particulate matter (PM_{10}); and lead (Pb). While ozone is a regulated criteria pollutant, it is not directly emitted from sources. Ozone forms as a result of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) reacting with sunlight in the atmosphere.

The specific purpose of Section 176(c) is to make emissions from Federal actions consistent with the Clean Air Act's air quality planning goals. The general conformity rule applies to any Federal action occurring in air basins designated as nonattainment for criteria pollutants or in attainment areas subject to maintenance plans. The intent of the provisions is to foster long-range planning for the attainment and maintenance of air quality standards by evaluating the air quality impacts of Federal actions before they are undertaken. Therefore, any action planned for the installations you mention will occur within a nonattainment area, which will trigger the need to perform a conformity analysis.

COORD AF/CEVC

A positive conformity determination may be demonstrated by determining that the Federal action will not increase emissions over baseline emission levels. It must also demonstrate, by EPA standards, that the Federal action will not cause or contribute to new violations of any national air quality standard in the affected area, nor increase the frequency or severity of an existing violation. Implementation of the action must be in compliance or consistent with all relevant existing conditions.

The conformity analysis for the Federal action examines the impacts of the direct and indirect net emissions from mobile and stationary sources, and emissions from any reasonably foreseeable Federal action. The analysis is based on the latest planning assumptions derived from population, employment, and travel data acquired from the local metropolitan planning organizations in the area where the Federal action is to occur. The latest and most accurate emission estimation techniques must be applied.

Edwards Air Force Base (AFB) is located in three different Air Quality Management Districts (AQMD). The majority of the installation is in Kern County AQMD, which is in serious nonattainment for ozone (to include its precursors of volatile organic compounds and nitrous oxides), and portions are in moderate nonattainment for PM_{10}. The southeast portion of the base is located in the Mojave Desert AQMD, which has areas of moderate nonattainment for PM_{10}, and portions are in severe nonattainment for ozone. Finally, the southern region of Edwards AFB is located in the South Coast AQMD which is in severe nonattainment for ozone, serious nonattainment for PM_{10}, serious nonattainment for CO, and nonattainment for NO_2. The EPA considers transient emissions from neighboring air quality management district boundaries in defining nonattainment areas.

The necessity of a conformity analysis alone does not bar a Federal action. Conformity may be shown after analysis, or the emissions associated with the action may be viewed as de minimis. Even where the action by itself might violate conformity, mitigation measures may be implemented which, when coupled with the action, will achieve positive conformity. Operational readiness is a critical consideration when making force structure beddown proposals; however, the Air Force must also consider the impacts of relevant air quality issues.

To support the 1995 Base Realignment and Closure (BRAC) process, each eligible Air Force installation answered a detailed questionnaire. In addition, Edwards AFB was evaluated by the Joint Cross-Service Group for Test and Evaluation (JCSG-T&E), for which they completed another questionnaire. All the gathered data was verified and certified at the base, Major Command and Air Staff levels before acceptance by the Air Force Base Closure Executive Group (BCEG) for their deliberations.

The BCEG evaluated each Air Force installation with regard to the eight Department of Defense criteria. Criterion II covers the air quality issues pertinent to Edwards AFB, of which you are most interested. The BCEG graded every installation against air quality standards published by the Environmental Protection Agency. Air quality restrictions present at any base were duly considered by the BCEG in conducting their 1995 BRAC analysis of Air Force installations. You can be assured that Edwards AFB received a fair evaluation during this process.

We appreciate your interest in this matter and trust the information provided is useful. A similar letter is being provided to Senator Feinstein.

Sincerely

STEPHEN D. BULL, III
Colonel, USAF
Chief, Programs and Legislation Division
Office of Legislative Liaison

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~~Director Air~~
DV, Frank C

Bean Kirkland ~~was Read~~ → 3/17/95.

Costs & close-
long run - remove force structure & looking at costs to close or other costs.
AF wants to close
- downsize force structure

Distance & mil con drive cobra costs.

John
~~Sean~~ Roop.

Prepared receiver facts in non attack area.

Telephone
Scott DSN 94 946-2751
Al Streiffert

Air Quality OBE'd-

April 18 - 1

3 years & non attack.

~~Ability to acq~~ Air quality issues inhibit moving ability to accept mission upt
Adds heavy -

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THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950321-7

FROM: FEINSTEIN, DIANNE	TO: DIXON
TITLE: SENATOR, (CA)	TITLE: CHAIRMAN
ORGANIZATION: U. S. CONGRESS	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED:	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL			
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON		(✓)	
DIR./COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA			
COMMISSIONER COX			
COMMISSIONER DAVIS			
COMMISSIONER KLING			
COMMISSIONER MONTOYA			
COMMISSIONER ROBLES			
COMMISSIONER STEELE			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER			
AIR FORCE TEAM LEADER		X	
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			
DV	✓	Page 2	
then BB	✓	LAST PAGE	

TYPE OF ACTION REQUIRED

(✓)	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

LETTER OF SUPPORT FOR LOS ANGELES AFB, STATING IT SHOULD NOT BE COMPARED WITH KIRTLAND AFB.

(SEN BOXER AND 15 CONGRESSMEN ALSO SIGNED)

Due Date: 950323	Routing Date: 950321	Date Originated: 950317	Mail Date:

Congress of the United States

Washington, DC 20515

March 17, 1995

Please refer to this number when responding 950321-7

The Honorable Alan J. Dixon
Chairman
Defense Base Closure and Realignment Commission
1700 North Moore Street
Suite 1425
Arlington, Virginia 22209

Dear Mr. Chairman:

We are writing in strong support of Los Angeles AFB and to express our concern over several issues that have been raised by the New Mexico Congressional Delegation and other advocates of Kirtland AFB.

MISSION CAN BEST BE ACHIEVED IN SOUTHERN CALIFORNIA

As you may know, Los Angeles AFB's Space and Missile Systems Center is the nerve center for the acquisition and development of space-based support to our fighting forces. The Center is responsible for purchasing most Department of Defense satellites and rocket boosters and plays a vital role in our nation's military programs.

Los Angeles AFB is also home to the Aerospace Corporation, a Federally Funded Research and Development Center that provides systems engineering support to a variety of U.S. national security space programs. Using unique, state-of-the-art tools, data collection and laboratories, Aerospace provides a full range of scientific and engineering talent for space systems, launch vehicles and ground stations. This unique and vital capability is not found elsewhere in the nation.

Additionally, Southern California is the hub of the country's defense industry and is home to almost all major aerospace companies, as well as to several leading institutions of higher education with quality engineering schools. Los Angeles AFB's strategic location allows the Air Force and the Defense Department to work directly with nearby companies and production facilities, as well as access the research and manufacturing capabilities of the local population. This synergy assures maximum responsiveness to our national security needs.

The expertise at Los Angeles AFB, both in personnel and materials, has been developed over four decades and cannot be duplicated or transferred to any other location without incurring tremendous human and economic costs. Furthermore, a closure or realignment of Los Angeles AFB would cause an unacceptable disruption of the Defense Department's critical space and missile program.

CLOSING LOS ANGELES AFB IS NEITHER COST-EFFECTIVE NOR PRACTICAL

In addition to the adverse national security implications of a Los Angeles AFB closure, it clearly does not make fiscal sense to close the base. As the enclosed chart indicates:

* it would cost almost twice as much to close Los Angeles AFB as it would to realign Kirtland AFB ($450 million vs. $277.5 million);

* the Air Force would save more than three times as much by realigning Kirtland AFB as it would by closing Los Angeles AFB ($464.5 million vs. $142 million);

* recurring annual savings would be substantially higher at Kirtland AFB than at Los Angeles AFB ($62 million vs. $50 million); and

* savings would be recouped quicker at Kirtland AFB than at Los Angeles AFB (3 years vs. 10 years).

The fiscal advantage of Los Angeles AFB over Kirtland AFB is clear, but we also understand that it is not feasible to close Los Angeles AFB and move its assets to Kirtland AFB. Apparently, there are severe capacity and environmental restrictions at Kirtland AFB that would make the consolidation of Los Angeles AFB -- or other Air Force assets -- at Kirtland AFB practically impossible.

We agree with Pentagon leaders who say that any comparison of Kirtland AFB with Los Angeles AFB does not make sense. Secretary of the Air Force Sheila Widnall has stated that comparing Kirtland AFB with Los Angeles AFB is simply "flawed". Additionally, at a recent hearing before the Commission, Deputy Secretary of Defense John Deutch said that Los Angeles AFB is not a closure substitute for Kirtland AFB.

LOS ANGELES AFB: ECONOMIC IMPORTANCE AND QUALITY OF LIFE

In addition to its value to U.S. national security, Los Angeles AFB is also an extremely important part of the California economy. The base generates $9.4 billion in economic activity in California alone. The closure of Los Angeles AFB would have a negative impact not only on the military and civilian personnel who work on base, but also on the tens-of-thousands of contractor personnel who rely on the base for their economic livelihood.

While concerns have been raised in the past about the quality of life at Los Angeles AFB -- specifically adequate and affordable housing -- these concerns have been satisfactorily addressed. The State of California and the Los Angeles Unified School District have provided the Air Force with 20 acres of land at nearby Fort MacArthur for housing purposes and Congress recently appropriated funding for new units.

Lt. General Lester Lyles, Commander of the Space and Missile Systems Center, recently said:

> "...things have dramatically improved in L.A. For the first time, we have military housing in L.A. that the Secretary of the Air Force, our Chief of Staff, and a Chief Master Sergeant of the Air Force have all characterized as a 'model' for the rest of our service...."

Furthermore, General Yates, Commander of Air Force Materiel Command, wrote in a March 6 letter that these actions have "vastly improved the housing situation and the quality of life for the men and women assigned to Los Angeles AFB...."

CONCLUSION

We cannot over-emphasize the importance of Los Angeles AFB to U.S. national security, as well as to the State of California. The base is a unique and vital military asset to the Air Force, and is truly a critical military resource. Any comparison of Los Angeles AFB with Kirtland AFB simply does not make sense, from a military or fiscal perspective.

Thank you for your consideration of this important matter.

Sincerely,

Pete Wilson, Governor

Dianne Feinstein, U.S.S.

Barbara Boxer, U.S.S.

Jane Harman, M.C.

Stephen Horn, M.C.

Julian C. Dixon, M.C.

Walter R. Tucker, III, M.C.

Carlos J. Moorhead, M.C.

Edward R. Royce, M.C.

Matthew G. Martinez, M.C.

Maxine Waters, M.C.

Jay Kim, M.C.

Esteban Edward Torres, M.C.

Anthony C. Beilenson, M.C.

Henry A. Waxman, M.C.

Xavier Becerra, M.C.

Lucille Roybal-Allard, M.C.

David Dreier, M.C.

Howard L. Berman, M.C.

KIRTLAND AFB VS. LOS ANGELES AFB

COST COMPARISON

	KIRTLAND	LOS ANGELES
ONE TIME COSTS	$277.5 M	$450 M
NET COSTS/SAVINGS[1]	+$158.8 M	+$375.8 M
RECURRING SAVINGS[2]	$62 M	$50 M
RETURN ON INVESTMENT	3 years	10 years
NET PRESENT VALUE[3]	save $464.5 M	save $142 M

* It would cost almost twice as much to close Los Angeles AFB as it would to realign Kirtland AFB ($450M vs. $277.5M);

* The Air Force would save more than three times as much by realigning Kirtland AFB as it would by closing Los Angeles AFB ($464.5M vs. $142M);

* Recurring annual savings would be substantially higher at Kirtland AFB than at Los Angeles AFB ($62M vs. $50M);

* Savings would be recouped quicker at Kirtland AFB than at Los Angeles AFB (3 years vs. 10 years);

---

[1] After six year implementation period.

[2] After six year implementation period.

[3] Net costs/savings after 20 years.

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- they are a **direct impact** of the proposal, and
- the majority of **funding** for remaining DOE activities comes from DOD (through DOE Defense Programs).

1.3.3 Air Quality

Air Quality Considerations as They Relate to Capacity for Future Growth at Kirtland AFB

Albuquerque/Bernalillo County is currently classified as a low-moderate non-attainment area for the criteria pollutant carbon monoxide (CO). However, Albuquerque/Bernalillo County has not exceeded the National Ambient Air Quality Standards (NAAQS) for three years, making the area eligible for redesignation to attainment/maintenance status. As part of the formal redesignation procedure, the City's Air Pollution Control division has prepared a State Implementation Plan (SIP) for Maintenance of the CO standard. The SIP submittal is scheduled for public hearing before the Albuquerque/Bernalillo County Air Quality Control Board on April 13, 1995. Once approved, the SIP submittal will be transmitted to the EPA Region VI office by the Governor. EPA has committed to take action on the redesignation request by July 15, 1995. To date, no adverse public comments have been received, and all EPA comments have been addressed.

Phillips Laboratory Starfire Optical Range

Included in the SIP document is a maintenance demonstration which shows that even with significant projected increases in population, employment, and vehicle miles of travel, total CO emissions for the next ten years (analysis period through 2005) will be significantly lower than the 1993 emissions cap. This difference between the 1993 cap and projected emissions in subsequent years is the so-called "headroom" in the emissions budget. This headroom is generated as the 1993 vehicle fleet is replaced by newer, lower emitting vehicles, as well as by an upgraded vehicle inspection program, and the continued implementation of the oxyfuel program and mandatory no-burn program.

The various Air Force/Phillips Laboratory relocation to Kirtland scenarios ranging from an initial 625 employees to a total of 6000 employees would take up no more than 10% of this headroom and thus could be easily accommodated from an emissions cap perspective. In March 1994, Phillips Lab completed a conformity analysis which conservatively estimated that the relocation of 625 jobs to Kirtland would result in the addition of 85 tons of CO per year to the local airshed. The City's Air Pollution Control Division concurred with this estimate. Assuming 6000 relocations would generate 10 times the emissions or 850 tons CO per year and even rounding up to 1000 tons per year to be conservative, this figure is still less than 3 tons per day or less than 10% of the projected 31 tons per day headroom available in 1996. This percentage would be even less in later, higher headroom years when such sizeable relocations would realistically be fully realized. The implementation year of the proposal is a critical element of any conformity analysis.

In addition to the emissions cap and headroom issues, an applicable requirement of General Conformity to any proposed expansion at Kirtland involves project or plan specific demonstrations that the action will not cause or contribute to an exceedance of a National Ambient Air Quality Standards (NAAQS). General Conformity rules set specific thresholds of pollutants that apply to federal actions. The CO

threshold of 100 tons is applicable to non-attainment and maintenance areas. If a federal action will provide 100 tons or more of CO, as determined by a specific applicability analysis, then a more detailed site specific analysis using intersection modeling techniques becomes necessary.

In a CO non-attainment area without current violations like Bernalillo County or in a maintenance area such as Bernalillo County will become upon redesignation, this second level of analysis requires the federal agency to demonstrate that the proposed action will not cause or contribute to a violation of the NAAQS for CO. This is a significantly easier test to meet than that required for a CO non-attainment area experiencing violations where the federal action is not allowed to exacerbate an existing violation, cause or contribute to a new violation or delay attainment of the standard. By way of further comparison, the most difficult demonstration of conformity would be in an ozone non-attainment area where actions exceeding the 100 ton per year threshold are required to mitigate or offset emissions to no net increase.

It is important to note that should such an analysis for a specific proposal indicate a violation of the CO standard, the expansion would not necessarily be precluded. Moreover, the federal agency would not have to bring net emissions increase down to zero or even 100 tons per year. Rather, the agency would have to mitigate the actions' impacts so that the action did not cause or contribute to a violation. Federal installations like Kirtland are in a uniquely advantageous position in terms of mitigating CO emissions associated with vehicle travel and traffic congestion. In general, an Air Force base is capable of exercising a much greater impact on the commuting habits and on-site activities of its employees and tenants than other employers.

The City Air Pollution Control Division has reviewed the March 1, 1995, Preliminary Conformity Analysis for Kirtland, prepared by Radian Corporation and concurs with the generally conservative approach taken. The City also agrees with the study conclusion that the emissions cap would allow for a 20% growth at Kirtland by the year 2005.

In contrast, the Air Force conformity analyses appear to be oversimplified at best, resulting in incorrect conclusions. In his letter of March 15 to Senator Bingaman, Col. Bull accurately lists the numerous requirements of general conformity and states it would have been unwise for the Air Force to proceed with an action where a positive conformity determination was in doubt. Nowhere in said correspondence is it stated that such a conformity analysis was conducted specific to Kirtland, much less what assumptions or baseline data were used.

However, two statements made to Senator Bingaman's office raise serious questions about the purported conformity analysis. The first assertion in question is that a move of 2600 personnel to Kirtland would result in 450 tons of CO and that this would violate the SIP. This tonnage is less than 1 and 1/3 tons of CO per day or an insignificant 3% of the 1996 headroom. How does 450 tons of CO per year violate the SIP? We can only surmise that the Air Force failed to take into account the implementation year of the action, and, thus, the headroom in the emissions budget that would have been available.

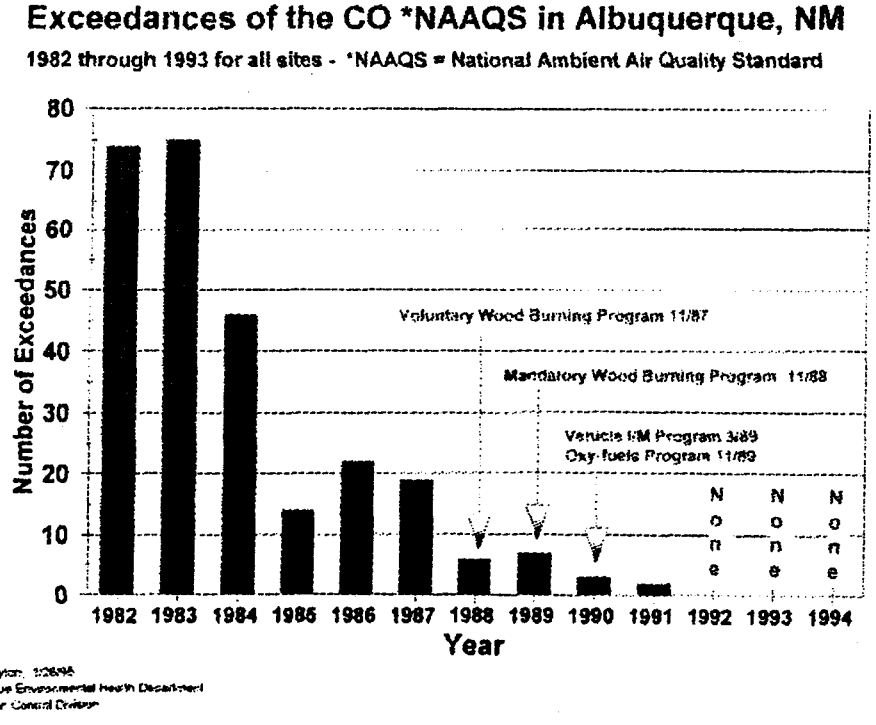
A related issue is the AF's statement that they had to use MOBILE4.1 due to federal law. In actuality EPA guidance even prior to the release of MOBILE5 was that 1990 inventories would need to be redone using MOBILE5. Moreover, while the preamble to the transportation conformity rule allows for a one year grace period from November 24, 1993, to November 24, 1994, this grace period was put in place to allow Metropolitan Planning Organizations more time to update their transportation conformity demonstrations. This grace period is not applicable to Albuquerque/Bernalillo County since both the 1994 and 1995 Transportation Conformity Demonstrations were done using MOBILE5a and a

recalculated 1990 Base Year Inventory as per EPA guidance. Consequently, this MOBILE5a based 1990 inventory was documented and available upon request.

In conclusion, the maintenance of attainment SIP does not significantly constrain future growth at Kirtland. It is unfortunate that the Air Force did not request the most current and relevant Air Quality information from the local agency before embarking on the purported analysis. Clearly, the result has been to unnecessarily penalize an environmentally proactive community with an award-winning vehicle inspection program, one of the nation's first and most effective oxyfuel programs, and the nation's first predictive meteorology based no-burn program.

Fairly late in its decision process (December 1994), the Air Force ordered a reevaluation of BRAC proposals based on air quality impacts. Prior to this time, Los Angeles AFB was a candidate for closure with a major portion of its mission moving to Kirtland. Within ten days of the reevaluation request, the Los Angeles proposal was withdrawn from consideration and Kirtland became a candidate for realignment. (See USAF BCEG minutes at Appendix E). Bernalillo County including Albuquerque and Kirtland AFB is in a non attainment status for carbon monoxide only, but **has been in compliance for three years**. As described, efforts are underway to redesignate it to attainment /maintenance status for carbon monoxide. The AF should have used current information which would have shown a positive impact of moving people to Kirtland. **That assessment would have kept Kirtland as a receiving base allowing additional missions such as the Space and Missile Systems Center to move from Los Angeles AFB. The BRAC should consider that alternative.**

The figure below illustrates the positive results of CO controlled programs in a growing community.



Ivan E. Peyton, 1/26/95
Albuquerque Environmental Health Department
Air Pollution Control Division

Document Separator

Base Civil Engineer:

- DOE controls ¼ of 52K acres.
- Post-realignment: control issue. There will be ongoing environ. cleanup.
- DOE will have 93% of property after realignment.
- Remain scenario: DOE gets "the back 40".
- AF will continue to have responsibility for the underground.
- DoD agencies may remain here in part. Will be in DOE containment area.

Support capabilities.

POST BRAC:

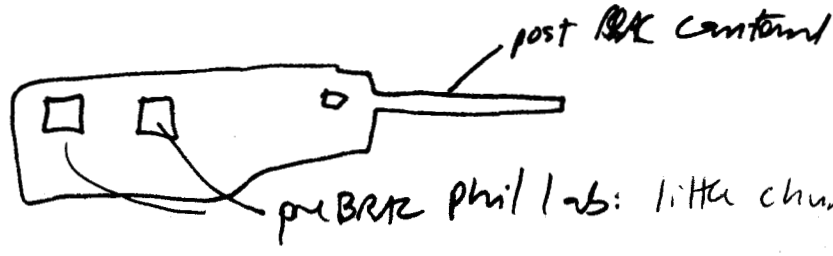
Containment projects: The Post-BRAC scenario.

~~plantipsstest~~: The DoD piece left: 1500 acres

1300 of this will be DOE:

Current: 5200 acres: 4400 is AF; rest is 8000 air force acres (?) scattered in back 40. (is this right?)

Post BRAC: phil lab will stay in their corner, but will consolidate.



active duty military people left post-BRAC: like 500-700 people. None will be low-rank. Community support will be living off the local economy.

Robles ongoing question:
How will we get Base support for residual people?

Remain services will have to

Post Realignment Support:

DoD 709 post-realignment positions will be required & support.
DoE 208 " "
82 (guard.)

[Question: what kinds of support is this? Fire/security/utilities/environmental?]

We need to get a coordinated response.
1079 total: mix of civ / military

DOD ~~was~~ providing services on a reimbursable bases before BRAC, post-BRAC it may come from DOE but it's not yet clear. However: ~~it's not to make~~ too much AF doesn't provide

3 ways in which support is provided outside
- DOD
- DOE
- contractors

22 environmental staffers, total.

AF will maintain

- Phillips lab content: "been there, done that."
- Underground: it's double (expensive) – it's not completely defined.
- DOE transfer
  Ownership remains w/ DoD
  DoE operating expenses.

Ownership stays DoD; not done immediately - until cleanup is done. Then, transfer will occur. (why couldn't transfer to another fed agency occur well before transfer is done?)

~~Re~~ Reuse opportunities a 2200 acres: limited.
- basis
- PX
- commissary
- piece on South side of runway.

Real savings ~~are~~ = base support functions that go away.
~~Little base~~
~~Years since base support functions~~

40 (5 years into future)
DoD remains the land owner; the control issue is in question.
Ordnance issue.

US DOE presentation | Vic Reis.

No coordination before BRAC announcement & deadly BRAC decision.

Sandia: 1949.
- Def. Programs: largest area 50% of lab budget.
- EE: Eng. & Envir. Waste mgt: nuc. mgt, disposal. 25% of budget.
- DoD + (other fed. clients.) = 25%.

Nuc. weap programs. Most important role.
DoD interfaces as "very important" to Sandia.

Did I assume this or was this explicitly stated? "Stockpile maintenance".

Not much weap. devel't going on now, but need to keep revamp / repair / replace type functions.

Common set of tech "underpinnings". 10% basic research.
Manufact'g, info, "pulse power."
(what would manufacturing be?)

Encroachment concerns.

Does DOE do any direct off-base operations? Yes.
- Pantex
- Nev. Test site.

But none of these ~~assist factors~~ feature off tenants.
They are all just DOE.

The DOE is not going to be the base commander, if they can help it.

4 entities will run the base together.
- Guard (self contained)
- airport
- Phil lab
- DOE - large contractor.

Sez DoD: "DOE is not ~~the~~ cheap": They have diff. req'ts.
Where 1 becomes 4 → there is going to be addl' costs.
Robles: What will be the extra cost imposed by having 4 "landlords"?
There may be 4 sets of requirements.
You may attain greater ~~total~~ capability (a benefit of doing the division) — but the ~~not~~ objective of saving $ won't be addressed.

1020 fed employees for DOE.

Zones of hazard:

- "light control"
- Buffer zone
- actual hazards:

burning weapons
dropping weapons
submersing weapons
testing failure in lots of ways.

Testing video - Sandia → actual hazards

Rocket testing, nuc weapons testing, test burning, etc.
to make sure that weapons won't be faulty.

Environ. ~~redundancy~~ headache: not nec. in terms of cleanup (which they allude is manageable) but trying to avoid hazards.

Kirtland:

Not an NPL site.

Some IR sites on DOD & some on DOE:

Red areas: unexploded ordnance: a lot of tenitry.

"Credibility, PR" are some of the reasons cited that Kirtland is not on ~~the~~ NPL.

Encroachment Concerns.

- Curtailing mission requirements
- Commingled land use + infrastructure of haz zone - but what about if ordnance accident.
- Public expectations re: land use.
- Potential SNL liability.

Public will want more reassurance about safety margins if DoD pulls out. We need MP's - they carry more authority.

Mayor: would rather have military guard the weapons than sandia.

Financial presentation:

Global assumptions:
Realignt: 3-5 yrs.
DOE/SNL will only landlord their own contract.
DOE/SNL will minimize their contract as practicable

Cost planning scenario. Assumptions:
- Buffers are included in cost estimates.
- AF buildup as mothballed / pickled -
- DOE will assess cost benefit & reactivate pickled building.
  Some of the prime buildings will be pickled.

Estimates for activity areas:
- Public safety - fire, police
- physical plant roads / lights - lands.
- utilities.
-

{ assume 4 diff. fire protections.,

Allied signal G.L. will have to pay for

Costs:
Conversion: 1-time. Hiring contract people - doing clearances - etc.
Some facilities

28.6 mill in utilities

"Resource Inputs" charts:

	Conversion	Operating	FTEs
Public safety			
Physical Plant			
Utilities			
DOE			
Equipt O&M + replacmt			
Incremental costs			

Other DOE Issues –

- Loss of Nuc Operations Synergy.
- Kirtland underground munitions storage complex.

Final Slide

significant impact on ongoing operations

~~significant~~

significant one-time + recurring costs

DoD/DOE infrastructure closing ties.

Costs to other tenants?

(★) what is the facility "handoffs" that will occur?

Staff follow-up. what is assumed to continue / transfer / cease?

Robles: There is no "operational stoppers" to transfer authority

- There is a learning curve problem
- There is a cost problem.
- There are commuting intensities with the ongoing storage / reckoning with nuc. weapons.

This site will be a long-run "hub" for DOE.
DOE unit so avg.

Rules: conclude morning
what does it cost today to operate Kirtland, versus
what ~~does it~~ will it ~~cause~~ cost in future

Afternoon:

AFOTEC:
Inception to end of program.
Evolution of OT&E - Thru ~~the~~ 50's
OT&E - direction - lots of time spent on Road going to various places

Kirtland an easier commute than England?
No testing

Relocation:
ordinary transition to England.
A single site - ~~Kirtland~~
Being estimated: transportation of ships & civilian personnel - 3 distinations (Edwards, Co. Springs)
communications - computers
environment.
(increased or changed TDY: not in COBRA factor.)

AFOTEC will need a new building, it seems -
No empty space.
Total construction done in 2000
~$180 per sq ft cost of building
over relocation to England.

DNA

DNA - why does it need to be operating? Safety / security of stockpile.

~~Con~~

Montoya: ~~worldwide~~ worldwide plutonium recapture.

DNA: had just put $3M into redoing / building new facilities at Kirtland.
DNA didn't want their activities disbursed.
DNA proposal heard that 50 active mil. must be left – issues min. # } military people that saved mark was 120. > this exceeded AF ceiling.
Given that AF had to min. military, i.e. must move to Kelly, Nellis;
AEDC & rad testing must stay. } 25 people.
DNA Couldn't keep its mission here and reduce #'s.
Only solution was: MOVE.

Relocation options:
1) Relocate to 1 site: Nellis proposed.
~~Environmental~~ restrictions: not a constraint.
Relocate all to Hollaman: air traffic concern?
No room for DNA.
2) 3-site option.

Question Mark: Can DNA successfully move from White Sands to Nevada Test Site?
DNA can do its mission this way.
It's ~~efficient~~ to colocate with DOE, ~~but~~ & SNL, but it's not essential.
Fiscal impact:
DNA is ~~cap~~ cranky #'s.

BRAC move: Kelly Nellis $94 M - doesn't include ~~Not include~~ TDY. Robles: recurring costs & recurring savings need to be estimated.

Air Force estimate –
$94/what goes in it R 94 million.

DNA
^ Remain at Kirtland could be reconsidered –
Blume's original cap &
Robles – ^ 50 ~~+ 500~~ has now 9 + 500.

A 2-site relocation might be reconsidered.
Nellis and / or Hollomen could be a choice.

⇨ ~~If~~ If military stay is below can be 100 +, DNA wants + / will remain. So far, DoD option doesn't include this proposal.

(1) Stay – if manpower allotment increase. (ie: 100 +.)
~~Keep~~ (2) Nellis & / or Hollomen
(3) 3-Location command.

Rand Study: Stockpile can come down, so infrastructure must reduce. DoD needs ctr. of excellence for nuc. expertise.
Fewer resources for individual missions

DNA storage: active stockpile w/ with the fighting forces.
Inactive stuff maintained at Navy + AF depots.

Army
How much overhead will fly contract to need.

KUMSC - ~~[illegible]~~

DOE-security: Fed marshalls -
Maintain is contracted
receive store maintain ship secure weapons.
maintain military.
work force size will ↑
operational cost will ↑

ASSUMPTIONS: they have to high folks at a certain (high) grade level.

Worried about perception that the AF "walked away"
Total civilianization recommended; it will definitely cost more but they don't know

Comm: are those people out there is the work force that you could call upon to come do the nuc work.

Phillips Lab -
Mission Area Plans -
Lots of commercialization - 80% of budget goes out to industry & academia.

Space & missiles exp'mt –
need ± turn thru out ± Maj com's –

TAOS – technology – "fly before you buy" : sim customer
Lasers & imaging Directorate –

Laser propogation – Airborne Laser system – kill scuds during boost phase.
This is the only lab that does it.
This is the highest mil val rank of its type.

Largest tele type is DoD –
COSTS – Phillips Lab :
O&M costs – 1 time costs ~ assc't w/ movg to East side – moving 9 facilities to west side.
1 – time O&M costs (not milcon)

in FY 95 15.8 M
FY 97 17.0 M

Ribbs question: ~~air staff~~ will ~~HQ~~ KAFB ∧ get feedback from AF HQ? yes –

Recurg O&M : ~30M ± run Phil Lab as is.
If phillips lab gets
∧ Military + Milcon : if it stayed inside DOE's ~~AF~~ wire, it would be ultimately more expensive than (it is now. ?)

The world:

These guys want to do the

350 govt pessel.

Testg & Eval:

LA: Has moved 70% of Aviano people here. They will move regardless.

Onizuka: scheduled to move this summer - (on hold?)

Vandenberg will move, ~~0 AFB, M~~ (on hold?)

White Sands testg advantages.

coming here

500 ~~2500~~ people.

159 mil + 90 civ were planned.

Have spent 1 Mil. so far in ~~upgrades~~ infrastructure upgrades. ~~(upgrades?)~~

82 ~~parkas~~ positions have moved, 50 people have moved, ~~rads~~ & upgrades are largely complete.

BRAC inputs:

Catonmt pmintr — all ~~&~~ building w/in ~~perm~~ perimetr -

~~Red~~ Have reduced mil by ½. 19 positns have moved to another site.

- Hvy positns
- upgrade civilian positions
- Bos "tail"

~~Bos~~

Have proposed language which will allow them to stay outside Ft Cantonment.

- Norton AFB folks scheduled to move - ~20 people move here from Onizuka.

Summary:

- Colocation w/ Phillips Lab is critical
- Move directed since 94 - move is proceeding as needed.

AF Training people.
Low
• ordnance disposal – ? why do they sep do ord. disp.

82 people ~~(~~ (full time) will be added to function on A base –

~~was added~~
AFSA – from Norton. 80 moved.
~~cost~~ will cost $20M & more; this has not been factored in anywhere
~~80 people moved~~
Positions are converting from military & civ.
The Kelly excess ~~op~~ capacity isn't the kind of thing that

Document Separator

KIRTLAND AIR FORCE BASE, NEW MEXICO

There are potentially three major "show stoppers" at Kirtland Air Force Base:

1. **Costs**
2. **Security**
3. **Military population remaining on Kirtland AFB without support (i.e., hospital, BX, commissary, etc.)**

Suggested Questions for Kirtland AFB (by organization)

- **Sandia Laboratory (Remain in-place)**
  - **How will the Kirtland AFB realignment effect the Sandia National Laboratory operations?**
  - **How will the realignment effect the security of your operations?**
  - **Could you please comment on the increase of costs to Sandia due to the realignment?**

- **Phillips Laboratory (Remain in-place)**
  - **How many military personnel will be left after the base is realigned?**
  - **How will the decrease of military personnel effect your mission?**
  - **How will the Lab be supported after the Base is realigned?**
  - **I understand that some of the Space and Missile Systems Center Test and Evaluation Directorate have already arrived from Onizuka Air Station (DoD recommended it for realignment). Could you please tell us the current status of that organization?**

- **Field Command, Defense Nuclear Agency (Relocate most of its activities to Kelly AFB, a small portion will move to Nellis AFB, and a small contingency will remain in-place)**
  - **Could you please describe the relationship Field Command has with Sandia National Laboratory?**
  - **How will the realignment effect this relationship?**
  - **Does it appear the facilities at Kelly AFB are adequate for Field Command?**
  - **Will there be an increase in costs due to your personnel traveling back to Kirtland on a regular basis?**
  - **I've been told by my Staff that it appears the Interservice Nuclear Weapon School (INWS) will not be able to relocate to Kelly AFB as planned because of its requirement to use nuclear material. How will this impact your mission?**
  - **I've been told by my Staff that DNA is considering placing Technical On-Site Inspection (TOSI) facility (27 acres) in a cantonment area rather than relocating. How will this impact your mission.**

- **Kirtland Underground Munitions Storage Center (KUMSC) (Remain in-place; civilianize most of the slots)**
  - **Do you believe that the realignment of Kirtland AFB will have an impact on the security of KUMSC?**
  - **Do you expect an increase in costs to operate this facility?**

- **Air Force Security Police Agency (AFSPA)**
  - **Has the site survey for your organization's relocation to Lackland AFB been accomplished? Could you please comment on it? Will the new location satisfy your requirements? (This question could be asked of any organization that is relocating.)**

- **58th SOW (Relocate to Holloman AFB)**
  - **Do you know what the costs will be to relocate to Holloman AFB?**
  - **Does Holloman AFB meet all your operational needs?**
  - **Are there any other military installations where it might be better for the 58th SOW to relocate?**
  - **Do you have an estimate for how long it will take to relocate the Wing?**
  - **Do you have an idea how long the simulators will be "down" for? How will that impact your mission?**

Frank Cantwell/AF Team/April 15, 1995

Document Separator

Inhalation Tox. Research last.
Cat parcels how | ITRI |
No AF funding - provide info training & tours. Don't work directly for AF. No direct budgetary input. Serious indirect budget impact. Elec, sewer, road, tel.
Extreme animal rights groups → need buffer.
Not secret; publicize tour.
Burden in our activities - ~~exists~~ borne by DOE or maybe passed on to ITRI.
Would affect us for
+liability
Extra costs imposed by formerly private roads going public: they'd have to upgrade roads & be ~~eligible for~~

If DOE pulls out, what happens to your costs?
Economies of scale & shrink down ~~this~~ area or reducing activities.
violent factors:
~~Budget cutbacks~~
we don't belong to same
$20M funding - DOE might decide to just shut this thing down in lieu of a decision

$65M plant. Sandia / DOE contractor.
Hwy to canton
Draw perimeter with respect to Sandia activities, TOXICITY loss, & airport.
Explosive ordnance team was called - ~~dozen of~~ a trash site.

- Cost
- Security
- Infrastructure.

Get list of 40 interactions from Toxicology Inst. w/ DoD.
Partnerships –
Starfire Lab
Operations –
Loss of civil engineering support.
10 sq. mi
Optical research needs maintenance.
Have to absorb all civil engineering
Communications: all basic telephone services –
computer network interface.
Col. Larson, Lasers & Imaging directorate.
Interface w/ space command;
Cheyenne Mtn.
Message traffic from space command.
All labs are fire-alarmed.
Safety inspection & maintenance;
Security: Starfire Lab is not the highest security
concern on this site.
$80 - $100 m. facility.
Private security guys
400 lbs of ice around the starfire facility –

Experts / operations site.
15 enlisted ~~technicians~~ technicians: 7 technicians, + some officers.
Civil Base housing is key.
12-13 civilians.

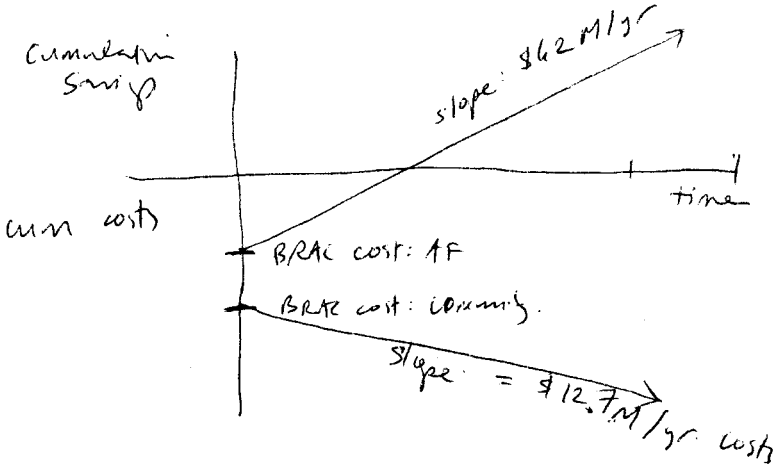
Phillips Lab is highly weather-dependent-
Priority of programs - we have about $\frac{1}{2}$ the # of people

Very concerned about light pollution.

Mesa Del Sol - now held in trust by UNM.
controlling lightings.
Search light at Isleta pueblo -
Protection ≠ North, East, South.

Needs to be more housing at Holloman.
USAF estimated recurring savings ~ $62M.

We believe it will be recurring costs.
Primarily, personnel costs. Someone's got to make it go.
VA Hospital: integration of VA & military hosp.
Plan to civilianize costs.
New costs due to CHAMPUS, security.
Shifted costs to DOE



Some OSD moves that come out of readiness. So don't keep draining it.

Shortage of people who understand the interaction of nuclear weapons. How to keep stockpile up & running. What do you do about nuclear accidents.
~~Haz~~
Nonproliferation
counterproliferation.
terrorism -
A support umbrella.
nuclear
It's in our interest to keep the Navy mission together

No savings gained; no reuse opportunity due to constraint.
KAFB is a federal installation, a model federal nuclear weapons. The first pc invented.
The most purely research-oriented military base - highest # of PhD's.
~~backbone~~
82 sq. mi - largest collection of activities w/in DoD.
"Hot pads" - unload & onload weapons.
Airborne laser aircraft. Electromagnetic pulse lab: DOE.
Manzano: previous storage area. (No longer)
2 mi sled track for testing. Starfire optical lab.
Burn site: you can burn environ. containers, weapons
All areas will be
Nuclear community is here. It's a model BRAC installation already because you have consolidated federal activities.
KAFB: essential in supply and irreplaceable research & testing facilities.
& Some of the facilities

One time cost / Recurring costs.
The essential → Recurring savings which will reoccur in the long run
"Recurring savings" is actually a recurring cost.
You're not consolidated, you're unconsolidated.

377th airbase wing provides support necessary for all the facilities needed to do their jobs.
1375 - ~~take~~ people taken away

Document Separator

RCN 670-008-07-01
DCN 95-670-008-06

PRELIMINARY CONFORMITY ANALYSIS

KIRTLAND AIR FORCE BASE, NEW MEXICO

Prepared for:

U.S. Army Corps of Engineers
215 N. 17th Street
Omaha, Nebraska 68102

Prepared by:

Radian Corporation
1821 Carlisle Blvd. NE
Albuquerque, New Mexico 87110

1 March 95

RADIAN
CORPORATION

RCN 670-008-07-01
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EXECUTIVE SUMMARY

Radian Corporation (Radian) prepared a preliminary conformity analysis for carbon monoxide (CO) at Kirtland Air Force Base (KAFB). The purpose of this analysis was to evaluate whether KAFB will continue to be able to grow and accept new missions, while still complying with the Albuquerque/Bernalillo County Air Quality Control Board's (A/BC AQCB) recently enacted (November 1994) General Conformity Regulation, Air Quality Control Regulation (AQCR 43). As applicable to KAFB, the General Conformity rule requires that operations which will increase CO emissions in nonattainment or maintenance areas such as Bernalillo County undergo conformity analyses to determine whether or not they will adversely impact ambient air quality in the area.

As a result of this preliminary conformity analysis, it appears that KAFB's growth will not be detrimentally restricted under AQCR 43. Even a 20% increase in overall growth at KAFB by the year 2005 will have a minimal CO emissions impact.

This report was prepared as an interim measure to achieve an immediate general understanding of the impact of AQCR 43 on KAFB's ability to grow. The report was prepared using general assumptions regarding KAFB's growth. A more detailed conformity analysis will be prepared at the request of KAFB to more fully characterize the impact of AQCR 43 on projected growth at the base.

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1.0 INTRODUCTION

1.1 Analysis Objectives

The objective of this scope of services was to conduct a preliminary conformity analysis for carbon monoxide (CO) for Kirtland Air Force Base (KAFB) by 1 March 1995. This product was prepared in accordance with the proposed scope addition requested by Mr. Walter S. Darr, III in his letter dated 23 January 1995.

The analysis focused on the potential impact on KAFB of the Albuquerque/ Bernalillo County Air Quality Control Board's General Conformity Regulation which was adopted 9 November 1994. Conformity provisions had originally appeared in the 1977 Clean Air Act Amendments (CAAA). However, the scope of the provisions were expanded in the 1990 CAAA by specifically defining conformity to the applicable State Implementation Plan (SIP).

The general conformity rule applies to Federal actions occurring in areas designated as nonattainment for criteria pollutants or in attainment areas subject to maintenance plans (maintenance areas). A criteria pollutant is a pollutant for which an air quality standard has been established under the Clean Air Act (CAA). The designation of nonattainment is based on the exceedances or violations of the air quality standard. A maintenance plan establishes measures to control emissions to ensure the air quality standard is maintained in areas that have been redesignated as attainment from a previous nonattainment status.

KAFB is situated in Bernalillo County, which is a nonattainment area for carbon monoxide. Therefore, any action which KAFB undertakes is subject to a conformity determination to identify whether the action will adversely impact ambient air quality in Bernalillo County.

The Albuquerque Environmental Health Department's (AEHD) Air Pollution Control Division plans to resubmit a Carbon Monoxide Redesignation Request and

Maintenance Plan for Albuquerque/Bernalillo County, New Mexico within the next few months. Once approved by EPA, this will make Albuquerque a maintenance area for carbon monoxide (CO). The KAFB conformity analysis was limited to CO because this is the only pollutant for which Albuquerque is in nonattainment. Although other pollutants, such as the ozone precursors volatile organic compounds (VOC) and nitrogen oxides (NO_x), may become important limiters to KAFB's growth, these pollutants were not analyzed under this scope of work. (Albuquerque is in attainment for ozone.)

This report addresses the interim evaluation of KAFB's ability to accept new missions under the limitations of AQCR 43. A more complete evaluation of KAFB's future conformity will be addressed in a separate report.

1.2 Methodology Summary

As part of the interim analysis, Radian has estimated the potential ability for KAFB to grow in the next ten years. This analysis was based on the projected growth estimates provided by the AEHD in its draft emission inventories dated 8 February 1995, prepared as part of their Carbon Monoxide Redesignation Request and Maintenance Plan for Albuquerque/Bernalillo County, New Mexico. These data and the plan have not yet been finalized. The emission inventories prepared by the AEHD are based on population estimates and data from the AEHD's air permitting department, which may be incomplete. Validating this data was beyond the scope of this project. These emissions data, however, are the best that are available.

In order to evaluate KAFB's potential growth opportunities, Radian first performed a basewide CO emissions inventory, based on 1994 data (or data which are representative of normal operations), and then projected growth of the base over the next 10 years. Radian assumed that a 20% increase in overall activities at KAFB will occur between 1995 and 2005. This estimate was proposed by Radian, and agreed to by KAFB. Radian then determined whether or not the AEHD's growth projections adequately take into account KAFB's projected growth, and arrived at recommendations based on this analysis. Finally, Radian prepared this summary report which describes the results of these analyses and what factors may affect KAFB's ability to expand in the future.

As a continuation from the interim analysis, KAFB may be able to further identify the potential missions which could be moved to KAFB. The evaluation of the impacts of these missions could then be included in a final conformity analysis. The inclusion of these potential missions in the conformity analysis could be used to aid KAFB in attracting and securing these missions. Once the interim evaluation is complete and the possible missions are better defined, Radian and KAFB can more clearly identify what issues the final conformity analysis should target.

1.3 Report Structure

The remainder of this report is organized as follows: Section 2.0 addresses conformity compliance requirements, presents a discussion of applicability and exemptions from general conformity and outlines the procedure for demonstrating conformity; Section 3.0 presents the results of the CO emission inventory and emissions projections for KAFB; Section 4.0 presents the results of the comparison between the AEHD emission inventories and the KAFB inventories; Section 5.0 presents the conclusions of the analysis; and, Section 6.0 contains the references used in the report.

2.0 GENERAL CONFORMITY COMPLIANCE REQUIREMENTS

The purpose of AQCR 43 is to implement section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.) and regulations under 40 CFR part 51 subpart W. These regulations require that general Federal actions conform to the applicable SIP. In KAFB's case, any action taken at the base must conform with the AEHD's SIP. The SIP provides the guidelines for achieving and maintaining the National Ambient Air Quality Standards (NAAQS). AQCR 43 sets forth policy, criteria, and procedures for demonstrating and assuring conformity of general Federal actions to the AEHD's SIP. Conformity to the SIP, as defined in the CAA, means conformity to the SIP's purpose of reducing the severity and number of violations of the NAAQS to achieve attainment of such standards.

The Federal agency which is taking the action must demonstrate that the action conforms to the applicable SIP. Conformity provisions had originally appeared in the 1977 CAAA. However, the scope of the provisions were expanded in the 1990 CAAA by specifically defining conformity to the applicable SIP. The specific language is as follows:

> Conformity to a state implementation plan means:
>
> > *(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards; and*
> >
> > *(B) that such activities will not:*
> >
> > > *(i) cause or contribute to any new violation of any standard in any area;*
> > >
> > > *(ii) increase the frequency or severity of any existing violation of any standard in any area; or*
> > >
> > > *(iii) delay timely attainment of any standard or any required interim emission reduction or other milestones in any area.*

2.1 Applicability

AQCR 43, the general conformity rule, applies to all Federal actions which occur in all nonattainment and maintenance areas of and within Bernalillo County. Conformity determinations for Federal actions related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must meet the procedures and criteria of A/BC AQCB: Regulation No. 42, Transportation Conformity. For the purpose of this analysis, it is assumed that Federal actions which may occur at KAFB will be subject to general conformity and not transportation conformity.

The general conformity rule applies in areas which are designated as nonattainment or maintenance status. The designation of nonattainment status is based on exceedances of a NAAQS. Bernalillo County is currently designated as nonattainment for CO. Albuquerque violated the one-hour standard seven times during the late 1970s and early 1980s with a high value of 43 ppm in 1980. The eight-hour standard was frequently violated in the 1970s and 1980s, with values reaching as high as 29.8 ppm. The NAAQS for CO are 9 ppm for an 8-hour average concentration and 35 ppm for a 1-hour average concentration. Both standards are not to be exceeded more than once per year (40 CFR 50.8). Bernalillo County was designated nonattainment for CO in 1978 (43 CFR 8962 and 9016, 3 March 1978.)

A maintenance area is an area which had been designated nonattainment for a pollutant, but which has been able to reduce emissions such that the NAAQS is no longer exceeded. In order to become designated as a maintenance area, EPA guidance requires two consecutive calendar years of no more than one exceedance per year of the NAAQS at any monitoring station for an area to be eligible for redesignation (EPA memorandum dated 4 September 1992 from John Calcagni, Director, Air Quality Management Division). Albuquerque has three complete years, 1992, 1993 and 1994, with no exceedances of the CO standards recorded at any of its air monitoring sites.

A request for redesignation is currently being prepared by the AEHD Air Pollution Control Division for submittal to the EPA within the next few months. The request

will fulfill five specific requirements of the 1990 CAAA. The first two requirements that Albuquerque must fulfill are: that the area has attained the NAAQS for two years; and that a plan has been developed that will maintain the standard for at least 10 years from the date of EPA approval. In addition, the following three requirements must be fulfilled: that the county has a fully approved SIP; that the improvements in air quality are a result of permanent and enforceable reductions in emissions; and that Bernalillo County is in full compliance with all other applicable sections of the CAA.

Albuquerque is thus currently in nonattainment and is expected to become a maintenance area in the near future. Therefore, should KAFB undertake a significant Federal action, it must demonstrate conformity with AEHD's SIP. In order to focus conformity requirements on those actions which are considered to have potentially significant impacts on the ambient air quality, de minimis thresholds were established in the final EPA rule. The de minimis values for CO are based on the CAA's major stationary source definition. A conformity determination is required when the annual total of direct and indirect emissions from a Federal action, occurring in a nonattainment or maintenance area is equal to or greater than the de minimis value. For CO the de minimis value, in both nonattainment and maintenance areas, is 100 tons per year (tpy).

A Federal action which does not meet the 100 tpy threshold may still be required to perform a conformity analysis if the sum of its direct and indirect emissions are "regionally significant." When the sum of the direct and indirect emissions of CO represents 10 percent or more of a nonattainment or maintenance area's total emissions of that pollutant, the action is defined as a "regionally significant" action and the requirements of general conformity apply. The 1993 Albuquerque emission inventory prepared by the AEHD for the CO season (1 November through 31 January) is approximately 40,000 tons. Therefore, a ten percent "regionally significant" action would emit 4,000 tons, making the 100 tpy threshold the limiting threshold.

In addition to these thresholds, some slightly ambiguous language which has been incorporated into AQCR 43 is the following:

> *"Agencies are nevertheless encouraged to coordinate with the air agency during the applicability analysis phase, especially when proposed actions are likely to produce*

meaningful levels of pollution even though the amount calculated may be below the identified thresholds. Awareness by the air agency of the many actions below the thresholds will assist the air agency in overall planning efforts (e.g. emission inventories)."

Because "meaningful levels of pollution" has not been specifically defined under AQCR 43, it is left to the Federal Agency to determine whether or not the pollution levels are "meaningful." When determining the projected direct and indirect emissions of a Federal action, it may be advisable to submit the calculations to the AEHD, but not necessarily required.

2.2 Exemptions

The final EPA rule which has been incorporated into AQCR 43 contains several exemptions from the conformity analysis process. The following excerpt from AQCR 43 lists those exemptions which may apply to operations which occur at KAFB (see AQCR 43 for a complete listing of the exemptions):

C. The requirements of this regulation shall not apply to:

2. The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:

d. Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities.

g. The routine, recurring transportation of material and personnel.

h. Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and/or for repair or overhaul.

j. Actions, such as the following, with respect to existing structures, properties, facilities and lands where future activities conducted will be

similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; for example, relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency.

m. Routine operation of facilities, mobile assets and equipment.

r. Actions that implement a foreign affairs function of the United States.

D. Notwithstanding the other requirements of this regulation, a conformity determination is not required for the following Federal actions (or portion thereof):

1. The portion of an action that includes major new or modified stationary sources that require a permit under the new source review (NSR) program (section 173 of the CAA) or the prevention of significant deterioration (PSD) program (title I, part C of the CAA).

2. Actions in response to emergencies or natural disasters such as hurricanes, earthquakes, etc., which are commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of paragraph E of this section.

3. Research, investigations, studies, demonstrations, or training (other than those exempted under paragraph C.2 of this section), where no environmental detriment is incurred and/or, the particular action furthers air quality research, as determined by the air agency primarily responsible for the applicable SIP.

4. Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (e.g., hush houses for aircraft engines and scrubbers for air emissions).

5. Direct emissions from remedial and removal actions carried out under the Comprehensive Environmental Response, Compensation and Liability Act

(CERCLA) and associated regulations to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.

E. Federal actions which are part of a continuing response to an emergency or disaster under paragraph D.2 of this section and which are to be taken more than 6 months after the commencement of the response to the emergency or disaster under paragraph D.2 of this section are exempt from the requirements of this regulation only if:

1. The Federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional 6 months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests and foreign policy commitments; or

2. For actions which are to be taken after those actions covered by paragraph E.1 of this section, the Federal agency makes a new determination as provided in paragraph E.1 of this section.

2.3 Procedures for Determining Compliance

The first step in demonstrating compliance with the general conformity rule is to estimate the increase in the emissions due to the Federal action. The direct and indirect emissions should be summed and compared to the 100 tpy threshold. Once a Federal agency determines that the sum of the direct and indirect CO emissions associated with its action will be greater than 100 tpy, the facility must demonstrate conformity according to the guidelines given in AQCR 43. The Federal agency must clearly demonstrate that the total of the direct and indirect emissions from the action will not:

a. Cause or contribute to any new violation of any standard in any area;

b. Interfere with provisions in the applicable SIP for maintenance of any standard;

c. *Increase the frequency or severity of any existing violation of any standard in any area; or*

d. *Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including, where applicable, emission levels specified in the applicable SIP for purposes of:*

(1) *A demonstration of reasonable further progress;*

(2) *A demonstration of attainment; or*

(3) *A maintenance plan.*

In order to accomplish this, an ambient air quality analysis is required. Such an analysis for KAFB would need to address increases such as emissions from motor vehicle traffic to and on the base, increases in aircraft landing and takeoff emissions, increases in area source emissions such as heating for housing, increases due to construction activities, or any other CO-emitting activities associated with the action and the existing background concentrations of CO. Although stationary sources which undergo New Source Review (NSR) and/or Prevention of Significant Deterioration (PSD) review are exempt from the conformity determination requirement, these sources should be included in the modeling analysis.

Should KAFB decide to perform a more comprehensive conformity analysis for the base, an air quality modeling analysis will be essential. Modeling will be needed in order to determine the air quality impacts to compare to national and local ambient air quality standards. In discussions conducted between KAFB, Radian and the AEHD, it was agreed that ambient air quality modeling of motor vehicle emissions and aircraft emissions will be a vital component of KAFB's conformity determination.

3.0 KAFB EMISSION ESTIMATES

In order to determine the potential affects of AQCR 43 on growth at KAFB, it was necessary to compare KAFB's actual and projected future CO emissions to the AEHD's Carbon Monoxide Redesignation Request and Maintenance Plan for Albuquerque/Bernalillo County, New Mexico (the Plan) in order to determine whether or not adequate room for growth exists in the Plan for Kirtland. In order to perform this, the first step taken was to calculate a 1994 baseline for both annual and CO season emissions. Secondly, projected annual and CO season emissions for the year 2005 were estimated. These two sets of numbers were compared to the AEHD's city-wide emissions baseline inventory and projected city-wide emissions (found in the Plan) to determine whether enough room exists in the Plan for the growth of KAFB.

An outline of the approaches used to calculate these two sets of emissions and the emissions results are presented below.

3.1 Annual Baseline CO Emission Inventory of KAFB Sources (1994)

Stationary Sources

Radian completed a stationary source emission inventory for the CO-emitting sources at KAFB as part of the KAFB Title V emission inventory. Emissions were calculated using the Air Quality Utility Information System (AQUIS) database and 1994 data (or data representative of normal operations). Full explanations of the algorithms used in AQUIS can be found in Appendix A, Stationary Source Emission Calculations. Annual emissions from stationary sources are shown in Table 3-1.

Table 3-1

Annual Stationary Source CO Emissions for 1994

CO-Emitting Source	CO Emission Rate (Tons/Year)	Source of Data
Boilers	5.40	Survey Data
Internal Combustion Equipment	1.57	Survey Data
Aerospace Ground Equipment (AGE)	30.7	Survey Data
58th SOW Hush House	0.490	Survey Data
Air National Guard Hush House	25.6	Permitted Emissions
Open Burning	4.80	Modeling Results
Open Detonation	22.9	Modeling Results
Total Annual Emissions	91.5	

Area Sources

Emissions were also estimated from KAFB's area sources: base housing woodburning fireplaces and natural gas usage in residences. The emission estimation methods, based on AEHD's Carbon Monoxide Redesignation Request and Maintenance Plan for Albuquerque/Bernalillo County, New Mexico (the Plan) emissions estimates, are described in Appendix B. Table 3-2 presents the results of the emission estimates.

Table 3-2
Area Source CO Emission Estimates

Area Source	CO Emissions (tons/year)
Woodburning	136
Residential Gas Usage	7.61
Total Area Source Emissions	144

Mobile Sources - Vehicles

In addition, an inventory of on-road and off-road vehicle emissions was performed. Mobile vehicle sources included all motor vehicles which drive onto the base (commuter vehicles), as well as government vehicles which are driven exclusively on the base (on-base vehicles). The EPA Program MOBILE 5a was used to generate grams/mile CO emission factors for the vehicles at KAFB.

Commuter traffic volume was taken from a Traffic Engineering Study prepared by the Middle Rio Grande Council of Governments of New Mexico (MRGCOG) in 1993. (The surveillance of traffic conditions in Albuquerque is an on-going responsibility of the MRGCOG.) A copy of the traffic count report and the emission calculations are contained in Appendix C. 1994 emissions were estimated by scaling up the 1993 emissions

by 20%, as recommended by Mr. Floyd Herrera (846-6186) of the KAFB Civil Engineering Department. Because data on the actual commuter vehicle types was unavailable, Radian used the default vehicle mix in MOBILE 5a.

A total on-base vehicle traffic count was provided by Civil Engineering. Although KAFB keeps records on the types of vehicle and the number of miles traveled by each type of on-base vehicle, these data were not available in time for this report. Therefore, a representative mix of vehicle types was selected, and miles traveled was assumed. Data and emission calculations for base vehicles are also contained in Appendix C. Table 3-3 below presents a summary of the CO emissions calculated for motor vehicles at KAFB.

Both the commuter and on-base vehicle data include Sandia National Laboratories (SNL) DOE vehicles. Sandia vehicles comprise approximately 40% of the total on-base vehicles; although the percentage of Sandia vehicles in the commuter traffic is unknown, it is expected to be similar to the on-base percentage. Although these vehicle emissions are not directly attributable to KAFB's activities, they were included in the analysis because they drive on KAFB property.

Table 3-3

Motor Vehicle CO Emissions

Vehicles	Annual CO Emission Rate* (tons/year)	Source of Data
Commuter	18,500	Traffic Counts
On-Base	810	KAFB Vehicle Maintenance
Total Motor Vehicle Emissions	19,300	

* Includes SNL/DOE vehicles.

Mobile Sources - Aircraft

A CO emissions inventory was performed for KAFB aircraft. Table 3-4 below presents a summary of the annual emissions from KAFB's aviation groups' landing and takeoffs (LTO) which took place in 1994. Transient aircraft emissions (from those aircraft not associated with the base but which land at the KAFB strip), however, are calculated using 1989 data because 1994 was an atypically low year for transient aircraft volume. Therefore, 1989 was chosen as the busiest year in terms of aircraft volume from the past five years. The detailed calculations and methods for aircraft are described in Appendix D of this document.

Table 3-4

Landing and Takeoff Aircraft CO Emissions

Organization	CO Emission Rate (Tons/Year)	Data Year
Air National Guard	66.6	1994
United States Forest Service	11.67	1994
58th SOW	47.8	1994
United States Customs Service	4.86	1994
Transient Aircraft	162	1989
DET 2	4.43	1994
Total Aircraft LTO Emissions	297	

Summary of 1994 Annual Emissions

Table 3-5 summarizes the 1994 annual CO emissions from KAFB. This will be used as KAFB's baseline 1994 emission inventory, and will be used as the basis for projecting growth to the year 2005, by assuming that the base will grow by 20% in the next ten years over 1994 numbers.

Table 3-5

Total CO Annual Emission Inventory

Source	Annual CO Emissions (tons/year)
Stationary Sources	91.5
Area Sources	144
Motor Vehicles	19,300*
Aircraft Takeoff & Landings	297
Total 1994 Annual Emissions	19,800

* Includes SNL/DOE motor vehicle emissions.

3.2 1994 CO Season Emissions for KAFB

The CO season in Albuquerque, when CO levels within the City are frequently high, occurs during November, December and January. Therefore, the AEHD has prepared a seasonal CO emission inventory. In order to compare KAFB's CO emissions to the AEHD seasonal emission inventories, the annual emission rates had to be converted to seasonal emissions. For those operations which are independent of season and operate year-round, a simple ratio of 92 CO-season days per 365 days per year was applied. The sources for

which this was assumed to be true are internal combustion equipment, AGE, jet engine testing hush houses, open burning, open detonation, residential natural gas usage, and aircraft LTO emissions. Boilers and woodburning were assumed to be emitting only during the CO season. Motor vehicles, for which emission factors for CO vary according to ambient air temperature, were calculated separately for the CO season using adjusted MOBILE 5a factors. Table 3-6 summarizes the CO season emissions for KAFB.

3.3 Projected KAFB Annual CO Emissions - 2005

Future emissions at KAFB were projected in order to compare against the AEHD's projected growth. All sources of emissions were assumed to increase their annual activity by 20% over 1994 levels by the year 2005, except for those sources which have permitted limits (Air National Guard Hush House, Open Burning, and Open Detonation). This 20% growth estimate was proposed by Radian, and approved of by KAFB. For motor vehicle emission calculations, MOBILE 5a factors were regenerated for the year 2005. The resultant projected annual CO emissions for the year 2005 are shown in Table 3-7.

It should be noted that the projected 2005 annual emissions are actually lower than 1994 annual emissions, despite a 20% assumed increase in traffic volume. This is due to the use of the MOBILE 5a motor vehicle emission factors, which were regenerated for the year 2005. The MOBILE 5a program predicts that an approximately 25% reduction in emissions from motor vehicles will occur by the year 2005. Because motor vehicles contribute a majority of the CO emissions at the base, the 25% reduction in individual vehicle emissions outweighs the 20% increase in overall growth.

3.4 Projected CO Season Emissions - 2005

Because the AEHD's projected numbers are in terms of CO seasons instead of annual emissions, annual projected emissions were weighted with the ratio of 92 CO season days to 365 calendar year days, with the exception of boilers and woodburning, as described above. The resultant projected CO season emissions for the year 2005 are shown in Table 3-8.

Table 3-6

CO Season Emissions for KAFB

CO-Emitting Source	CO Emission Rate (tons/season)
Boilers	5.40
Internal Combustion Equipment	0.400
Aerospace Ground Equipment (AGE)	7.74
58th SOW Hush House	0.12
Air National Guard Hush House	6.45
Open Burning	1.21
Open Detonation	5.77
Woodburning	136
Residential Gas Usage	1.92
Total Motor Vehicle Emissions	3,860*
Air National Guard Aircraft	16.8
United States Forest Service Aircraft	0 Forest Service only flies during fire season (June through August)
58th SOW Aircraft	12.0
United States Customs Service Aircraft	1.22
Transient Aircraft	40.8
DET 2 Aircraft	1.12
Total 1994 CO Season Emissions	4,100

* Includes SNL/DOE motor vehicle emissions.

Table 3-7

Projected Annual CO Emissions at KAFB in Year 2005

CO-Emitting Source	CO Emission Rate (tons/season)
Boilers	6.48
Internal Combustion Equipment	1.88
Aerospace Ground Equipment (AGE)	36.8
58th SOW Hush House	0.59
Air National Guard Hush House	25.6
Open Burning	4.80
Open Detonation	22.9
Woodburning	163
Residential Gas Usage	9.13
Total Motor Vehicle Emissions	18,000*
Air National Guard Aircraft	79.9
United States Forest Service Aircraft	14.0
58th SOW Aircraft	57.4
United States Customs Service Aircraft	5.87
Transient Aircraft	194
DET 2 Aircraft	5.32
Total Projected CO Annual Emissions	18,600

* Includes SNL/DOE motor vehicle emissions.

Table 3-8

Projected CO Season Emissions at KAFB in Year 2005

CO-Emitting Source	CO Emission Rate (tons/season)
Boilers	6.48
Internal Combustion Equipment	0.47
Aerospace Ground Equipment (AGE)	9.28
58th SOW Hush House	0.15
Air National Guard Hush House	6.45
Open Burning	1.21
Open Detonation	5.77
Woodburning	163
Residential Gas Usage	2.30
Total Motor Vehicle Emissions	3,050*
Air National Guard Aircraft	20.1
United States Forest Service Aircraft	0 U.S. Forest Service flies only during summer months
58th SOW Aircraft	14.5
United States Customs Service Aircraft	1.48
Transient Aircraft	49.0
DET 2 Aircraft	1.34
Total Projected CO Season Emissions	3,330

* Includes SNL/DOE motor vehicle emissions.

4.0 COMPARISON OF AEHD EMISSION INVENTORIES WITH KAFB EMISSION INVENTORIES

The AEHD prepared a 1993 CO season emission inventory as part of its conformity redesignation plan. AEHD also prepared CO season emission projections for the years 1996, 1999, 2002 and 2005. The table below shows the AEHD's results:

Table 4-1

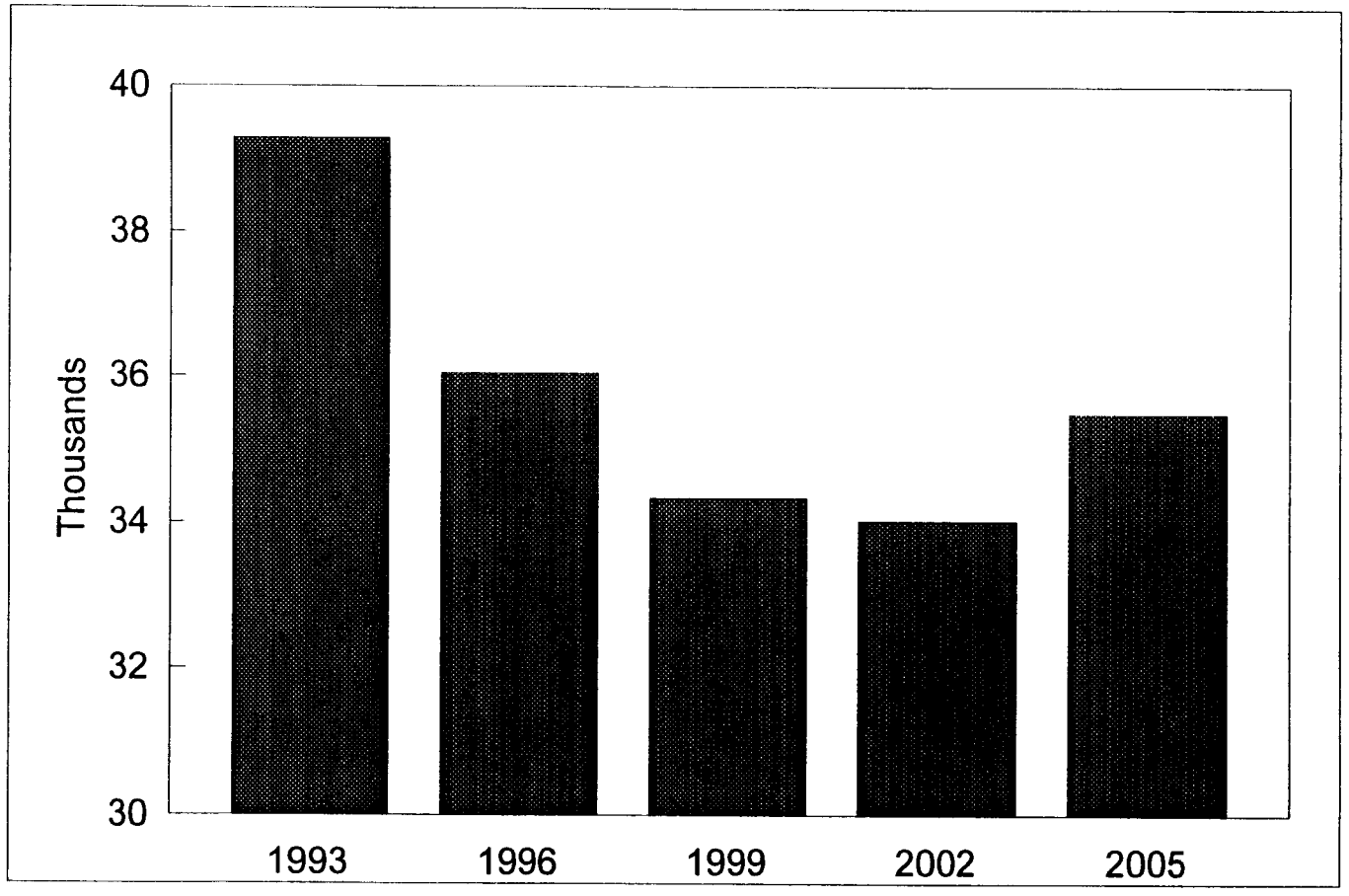
AEHD Emission Inventory Results for 1993 and Emission Projections

Year	Inventoried or Projected Emissions (tons/CO-season)
1993	39,294
1996	36,050
1999	34,335
2002	34,029
2005	35,490

Figure 4-1 on the following page shows these emissions graphically. AEHD predicts reductions in emissions despite projected continued growth in population. The AEHD attributes the improvement in air quality since the 1970s and 1980s and the continued improvement to the following air pollution control strategies which have been implemented in Albuquerque/Bernalillo County:

> *1. "A significant reduction in CO emissions is attributable to the federal motor vehicle emission control program. Emission standards for motor vehicles are established under Title II of the CAA. The 1990 CAAA requires lower emissions standard for vehicles in 1994 (Phase I) and even lower standards in 2001 (Phase II). These federal motor vehicle emission control standards will continue to lower CO emissions on a gram per mile basis as newer vehicles replace older vehicles."*

Figure 4-1
Albuquerque/Bernalillo County Seasonal CO Emissions as Determined by AEHD



2. *"Significant additional reductions in emissions can be directly attributed to three major local control programs."*

   a. *"The vehicle inspection and maintenance program (I/M) program administered by the Vehicle Pollution Management Division (VPMD) was started in March 1989."*

   b. *"Mandatory woodburning restrictions in November 1988."*

   c. *"And an oxygenated fuels program in November 1989."*

In comparing KAFB's current and projected CO season emissions inventories and the Albuquerque/Bernalillo County CO season emission inventory, we find that KAFB's emissions are a small fraction of Bernalillo County-wide emissions, as shown in the table below:

Table 4-2
Albuquerque/Bernalillo County and KAFB CO Emissions

Year	Albuquerque/ Bernalillo County CO Season Emissions (tons/season)	KAFB CO Season Emissions (tons/season)	KAFB's Percentage of Total Emissions
Baseline (1993/1994)	39,294	4,090	10
2005	35,490	3,330	9

5.0 CONCLUSIONS

5.1 Preliminary Conformity Analysis Results

From the results of this preliminary conformity analysis, it has been shown that not only does KAFB currently contribute only a small percentage of the City-wide total CO emissions, but that even a 20% increase in growth over the next 10 years at KAFB should not demand any additional emissions share.

The difference between the AEHD's baseline CO season inventory and the 2005 projected CO season emissions is approximately 3,800 tons. Therefore, Albuquerque/Bernalillo County has a 3,800 ton CO per CO season growth limit over the next ten years. Based on this interim analysis, KAFB can actually predict a decrease in overall CO emissions by the year 2005, due to reductions in emissions from motor vehicles. Even those sources at KAFB predicted for an increase in CO emissions (stationary sources, area sources, and aircraft) will only contribute an additional 40 tons of CO per CO season in 10 years over 1994 levels. This is only 1.1% of the total City-wide emissions growth allowed in the Albuquerque/Bernalillo County by the AEHD's State Implementation Plan.

Therefore, based on the interim analysis, it can be stated that KAFB has been allowed adequate room for growth, based on the 20% estimated KAFB growth factor. For the final conformity analysis, KAFB should better define what types of growth they anticipate undergoing in the next ten years, in order to determine whether or not the 20% growth factor is realistic.

5.2 Utility of Results and Limitations of Analysis

As described above, the results of this preliminary conformity analysis indicate that there is room in the City-wide emissions inventory for KAFB to expand 20% by the year 2005, and very likely well beyond.

However, the room for expansion may be used by other facilities besides KAFB. Sandia Laboratories, Philips Laboratories, Motorola, and other industrial facilities may be planning to expand or relocate to Albuquerque. The impact of all additional growth may not have been accounted for in the AEHD projected emission inventories. The 3,800 ton emissions growth increment will need to be split between KAFB and these other competing interests.

To illustrate the potential for growth in the area, a simple calculation was performed to determine the number of motor vehicles that could be added to the inventory before breaking the 3,800 ton/CO season threshold. Any additional growth in Albuquerque will very likely include additional motor vehicle traffic, already the most significant contributor to CO emission in Albuquerque. (According to the AEHD's 1993 emission inventory, 63% of the CO emissions are attributed to motor vehicles.) Although motor vehicle emissions are not the only source of CO emissions, they are the most significant. Using the very conservative assumptions presented in Appendix C, it was found that approximately 52,000 daily commuters could be added to the Albuquerque area during the CO-season before breaking 3,800 tons of CO per CO season.

It is important to note that this analysis is limited in that it does not evaluate a specific scenario, but has taken a broader view and has analyzed the AEHD's City-wide emission inventories and compared those to KAFB projected emissions. A very important part of a complete CO conformity determination will include ambient air quality modeling. CO is a localized pollutant, meaning that its impacts tend to be most important very near the source of emissions. Because of this, ambient air quality modeling is essential in determining whether or not new emissions will adversely affect air quality. Such a modeling analysis should include traffic and aircraft as well as background emissions.

6.0 REFERENCES

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Appendix A

Stationary Source Emission Calculations

Boilers

The Air Quality Utility Information System (AQUIS) program was used to calculate CO emissions from the boilers at KAFB. The AQUIS algorithm is based on the criteria pollutant emission factors for external combustion sources published in Section 1 of AP-42 and the boilers' annual consumption rates of fuel.

The equation for calculating CO emissions from the boilers is shown below:

emissions of CO (ton/yr) = (AU)(EF) / (2000 lb/ton)

where:

AU = Total annual fuel consumption, units/yr

EF = AP-42 emission factor, lb/10^6 units

The AP-42 emission factors are dependent on boiler size and fuel type. The 1994 fuel amounts were used to calculate the emissions shown in Table 3-1. Table A-1 lists KAFB's boilers, their size, and their fuel type.

The same procedure was used to calculate the projected emissions from boilers for the year 2005. It was assumed that boiler fuel usage will increase by approximately 20% over 1994 levels.

Seasonal emissions were assumed to be equal to annual emissions, since the boilers are predominantly fired only during the CO season (winter months).

Internal Combustion Equipment

AQUIS was used to calculate CO emissions from internal combustion sources at KAFB. The AQUIS algorithm is based on the type of engine (gas turbine, large bore, or small industrial reciprocating), the type of fuel being used, and criteria pollutant emission factors taken from AP-42.

Table A-1

Date: 02/18/95 KAFB External Combustion Sources

EQUIP_ID	Fuel type	Fuel Consumption (units/y	Unit of measure	Rated Input Capacity	# Equipmen
1002	GAS	77000000	CF	41621250	1
1003	GAS	61000000	CF	32917899	
1004	GAS	7000000	CF	10446650	
1005	GAS	7000000	CF	10446650	
1006	GAS	7000000	CF	10446650	
1201	GAS	4001893	CF	1210000	1
1202	GAS	7143875	CF	2160000	1
1203	GAS	17363586	CF	5250000	1
1204	GAS	17363586	CF	5250000	1
1205	GAS	12733297	CF	3850000	1
1206	GAS	1587528	CF	480000	1
1207	GAS	1587528	CF	480000	1
1208	GAS	5632417	CF	1703000	1
1209	GAS	2381292	CF	720000	1
1210	GAS	17297439	CF	5230000	1
1211	GAS	17297439	CF	5230000	1
1212	GAS	9459020	CF	2860000	1
1213	GAS	2626036	CF	794000	1
1214	GAS	3968820	CF	1200000	1
1215	GAS	2960078	CF	895000	1
1216	GAS	3194900	CF	966000	1
1217	GAS	859911	CF	260000	1
1218	GAS	7309243	CF	2210000	1
1219	GAS	4150724	CF	1255000	1
1220	GAS	7937639	CF	2400000	1
1221	GAS	7937639	CF	2400000	1
1222	GAS	1736359	CF	525000	1
1223	GAS	3307350	CF	1000000	1
1224	GAS	3307350	CF	1000000	1
1225	GAS	9237428	CF	2793000	1
1226	GAS	3307350	CF	1000000	1
1227	GAS	7848341	CF	2373000	1
1228	GAS	3194900	CF	966000	1
1229	GAS	2523508	CF	763000	1
1230	GAS	5857316	CF	1771000	1
1231	GAS	2811247	CF	850000	1
1232	GAS	2381292	CF	720000	1
1233	GAS	3194900	CF	966000	1
1234	GAS	2073708	CF	627000	1
1236	GAS	1074889	CF	325000	1
1237	GAS	3194900	CF	966000	1
1238	GAS	1322278	CF	399800	1
1239	GAS	1101347	CF	333000	1
1240	GAS	2381292	CF	720000	1
1241	GAS	13837951	CF	4184000	1
1242	GAS	6945434	CF	2100000	1
1243	GAS	2626036	CF	794000	1
1244	GAS	4961025	CF	1500000	1
1245	GAS	843374	CF	255000	1

Table A-1 (cont.)

EQUIP ID	Fuel type	Fuel Consumption (units/y	Unit of measure	Rated Input Capacity	# Equipmen
1246	GAS	3819989	CF	1155000	1
1247	GAS	2513586	CF	760000	1
1248	GAS	502717	CF	152000	1
1249	GAS	3968820	CF	1200000	1
1250	GAS	1653675	CF	500000	1
1251	GAS	3571938	CF	1080000	1
1252	GAS	9687227	CF	2929000	1
1253	GAS	9687227	CF	2929000	1
1254	GAS	3373497	CF	1020000	1
1255	GAS	694543	CF	210000	1
1256	GAS	3112216	CF	941000	1
1257	GAS	3439644	CF	1040000	1
1258	GAS	5589421	CF	1690000	1
1259	GAS	8334521	CF	2520000	1
1260	GAS	4497996	CF	1360000	1
1263	GAS	3194900	CF	966000	1
1264	GAS	3525635	CF	1066000	1
1265	GAS	3525635	CF	1066000	1
1266	GAS	1653675	CF	500000	1
1267	GAS	3472717	CF	1050000	1
1268	GAS	3340423	CF	1010000	1
1269	GAS	4894878	CF	1480000	1
1270	GAS	8377517	CF	2533000	1
1272	NO. 2 OIL	0	GAL	236000	1
1273	GAS	2665724	CF	806000	1
1274	GAS	2232461	CF	675000	1
1275	GAS	2232461	CF	675000	1
1276	GAS	2778174	CF	840000	1
1277	GAS	1207183	CF	365000	1
1278	GAS	1653675	CF	500000	1
1279	LPG(PROPANE)	10273	GAL	722000	1
1280	LPG(PROPANE)	9249	GAL	650000	1
1281	LPG(PROPANE)	14514	GAL	1020000	1
1282	NO. 2 OIL	0	GAL	2052000	1
1283	LPG(PROPANE)	9178	GAL	645000	1
1540	GAS	330735	CF	100000	1
1541	GAS	330735	CF	100000	1
1542	GAS	330735	CF	100000	1
1546	WOOD	0			233
1547	WOOD	0			233
1548	WOOD	0			233
1552	NO. 2 OIL	0	GAL	500000	1
1553	LPG(PROPANE)	4610	GAL	324000	1
14001	GAS	4894878	CF	1480000	1
14002	GAS	595323	CF	180000	1
14003	GAS	595323	CF	180000	1
14004	GAS	5291760	CF	1600000	1

Table A-1 (cont.)

EQUIP ID	Fuel type	Fuel Consumption (units/y	Unit of measure	Rated Input Capacity	# Equipmen
14005	GAS	763998	CF	231000	5
14006	GAS	0	CF		1
14007	GAS	3208129	CF	970000	1
14008	GAS	2728564	CF	825000	1
14009	GAS	661470	CF	200000	4
14010	GAS	248051	CF	75000	2
14011	GAS	843374	CF	255000	2
14012	GAS	248051	CF	75000	6
14013	LPG(PROPANE)	13518	GAL	950000	1
14014	NO. 2 OIL	0	GAL	6250000	1
14015	LPG(PROPANE)	9960	GAL	700000	1
14016	LPG(PROPANE)	5692	GAL	400000	1
14017	LPG(PROPANE)	9960	GAL	700000	1
14018	NO. 2 OIL	0	GAL	625000	1
14019	NO. 2 OIL	0	GAL	324000	1
14020	LPG(PROPANE)	15837	GAL	1113000	1
14021	LPG(PROPANE)	0	GAL		1
14022	LPG(PROPANE)	3202	GAL	225000	1
14023	GAS	2387907	CF	722000	1
14024	LPG(PROPANE)	2846	GAL	200000	1
14025	LPG(PROPANE)	14229	GAL	1000000	1
14026	LPG(PROPANE)	15403	GAL	1082500	1
14027	LPG(PROPANE)	5692	GAL	400000	2
14028	LPG(PROPANE)	1779	GAL	125000	3
14029	LPG(PROPANE)	505	GAL	35500	1
14030	LPG(PROPANE)	2348	GAL	165000	1
14031	LPG(PROPANE)	854	GAL	60000	2
14032	LPG(PROPANE)	996	GAL	70000	1
14033	LPG(PROPANE)	711	GAL	50000	1
14034	LPG(PROPANE)	640	GAL	45000	1
14035	LPG(PROPANE)	1067	GAL	75000	2
14036	LPG(PROPANE)	711	GAL	50000	7
14037	GAS	14883074	CF	4500000	1
14038	GAS	661470	CF	200000	1
14039	GAS	1736359	CF	525000	1
14040	GAS	1309711	CF	396000	1
14041	GAS	2149777	CF	650000	1
14042	GAS	112450	CF	34000	1
14043	GAS	152138	CF	46000	1
14044	GAS	99220	CF	30000	1
14045	GAS	125679	CF	38000	1
14046	GAS	132294	CF	40000	1
14047	GAS	148831	CF	45000	1
14048	GAS	148831	CF	45000	1
14049	GAS	138909	CF	42000	1
14050	GAS	132294	CF	40000	1
14051	GAS	99220	CF	30000	1

Table A-1 (cont.)

EQUIP ID	Fuel type	Fuel Consumption (units/y	Unit of measure	Rated Input Capacity	# Equipmen
14052	GAS	595323	CF	180000	1
14053	GAS	109143	CF	33000	1
14054	GAS	132294	CF	40000	1
14055	GAS	264588	CF	80000	1
14056	GAS	678007	CF	205000	1
14057	GAS	104182	CF	31500	1
14058	GAS	152138	CF	46000	1
14059	GAS	99220	CF	30000	1
14060	GAS	250036	CF	75600	1
14061	GAS	89298	CF	27000	1
14062	GAS	651548	CF	197000	1
14063	GAS	112450	CF	34000	1
14064	GAS	148831	CF	45000	1
14065	GAS	658163	CF	199000	1
14066	GAS	248051	CF	75000	1
14067	GAS	117411	CF	35500	1
14068	GAS	107489	CF	32500	1
14069	GAS	892984	CF	270000	1
14070	GAS	892984	CF	270000	2
14071	GAS	892984	CF	270000	2
14072	GAS	859911	CF	260000	2
14073	GAS	651548	CF	197000	1

The emissions were estimated using the following general equation:

emissions of CO (ton/yr) = (AU)(HV)(EF) / (2000 lb/ton)

where:

AU	=	total annual fuel consumption (gal/yr)
HV	=	heating value of fuel (BTU/gal)
EF	=	emission factor (lb/BTU)

The emission factors are dependent on the type of engine and the fuel being used. The amount of fuel used by internal combustion equipment at KAFB in 1994 was used to calculate the CO emissions presented in Table 3-1. Table A-2 lists each piece of internal combustion equipment, its engine type, fuel being used, and the heating value of the fuel.

The same procedure was used to calculate the projected emissions from internal combustion engines for the year 2005. It was assumed that the usage of internal combustion equipment will increase by 20% over 1994 levels in the next 10 years.

Seasonal emissions were also calculated for internal combustion equipment. The CO season is 92 days long, while internal combustion equipment is used throughout the 365 days of the calendar year. Therefore, seasonal emissions were determined by weighing the annual internal combustion emissions by the ratio of 92 to 365.

Aerospace Ground Equipment (AGE)

AGE CO annual, seasonal, and projected emissions were calculated in AQUIS, using exactly the same algorithm as the internal combustion equipment. Table A-3 provides a listing of the AGE equipment, type and amount of fuel used, and the size of the engine.

58th SOW Hush House

The 58th SOW performs engine testing on helicopters in their hush house. Emissions were estimated using the jet engine testing algorithm taken from AQUIS. However, AQUIS does not contain emission factors for the helicopters of concern, and therefore, the emissions were calculated outside of AQUIS.

Table A-2

Date: 02/18/95 KAFB Internal Combustion Sources

AQUIS ID	Type of engine	Rated power (hp)	Fuel type	Annual fuel use (units/yr)	Unit of measure
1169		56			
1285	INDUSTRIAL RECIPROCATING ENGINE	250	DIESEL FUEL	785	GAL
1286			DIESEL FUEL	1.78	GAL
1312	INDUSTRIAL RECIPROCATING ENGINE	712	DIESEL FUEL	4.908	GAL
1313	INDUSTRIAL RECIPROCATING ENGINE	712	DIESEL FUEL	3.566	GAL
1402	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1403	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1404	INDUSTRIAL RECIPROCATING ENGINE	23	DIESEL FUEL	0.0204	GAL
1405	INDUSTRIAL RECIPROCATING ENGINE	134	DIESEL FUEL	0.0977	GAL
1406	INDUSTRIAL RECIPROCATING ENGINE	268	DIESEL FUEL	0.3552	GAL
1407	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1408	INDUSTRIAL RECIPROCATING ENGINE	40	DIESEL FUEL	0.0372	GAL
1409	INDUSTRIAL RECIPROCATING ENGINE	40	DIESEL FUEL	0.0372	GAL
1410	INDUSTRIAL RECIPROCATING ENGINE	134	DIESEL FUEL	0.0977	GAL
1411	INDUSTRIAL RECIPROCATING ENGINE	369	DIESEL FUEL	0.5016	GAL
1412	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1413	INDUSTRIAL RECIPROCATING ENGINE	208	DIESEL FUEL	0.1422	GAL
1414	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1415	INDUSTRIAL RECIPROCATING ENGINE	402	DIESEL FUEL	0.5520	GAL
1416	INDUSTRIAL RECIPROCATING ENGINE	402	DIESEL FUEL	0.5520	GAL
1417	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1418	INDUSTRIAL RECIPROCATING ENGINE	1676	DIESEL FUEL	2.2814	GAL
1419	INDUSTRIAL RECIPROCATING ENGINE	469	DIESEL FUEL	0.6192	GAL
1420	INDUSTRIAL RECIPROCATING ENGINE	23	DIESEL FUEL	0.0204	GAL
1421	INDUSTRIAL RECIPROCATING ENGINE	101	DIESEL FUEL	0.0768	GAL
1422	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
1423	INDUSTRIAL RECIPROCATING ENGINE	34	DIESEL FUEL	0.0312	GAL
1424	INDUSTRIAL RECIPROCATING ENGINE	27	DIESEL FUEL	0.0252	GAL
1425	INDUSTRIAL RECIPROCATING ENGINE	335	DIESEL FUEL	0.4512	GAL
1426	INDUSTRIAL RECIPROCATING ENGINE	489	DIESEL FUEL	0.6422	GAL
1427	INDUSTRIAL RECIPROCATING ENGINE	44	DIESEL FUEL	0.0468	GAL
1432	INDUSTRIAL RECIPROCATING ENGINE	134	DIESEL FUEL	0.0977	GAL
1433	INDUSTRIAL RECIPROCATING ENGINE	268	DIESEL FUEL	0.3552	GAL
1434	INDUSTRIAL RECIPROCATING ENGINE	4	GASOLINE	0.0037	GAL
1435	INDUSTRIAL RECIPROCATING ENGINE	4	GASOLINE	0.0037	GAL
1436	INDUSTRIAL RECIPROCATING ENGINE	5	GASOLINE	0.0045	GAL
1437	INDUSTRIAL RECIPROCATING ENGINE	5	GASOLINE	0.0045	GAL
1438	INDUSTRIAL RECIPROCATING ENGINE	268	DIESEL FUEL	0.3552	GAL
1439	INDUSTRIAL RECIPROCATING ENGINE	40	DIESEL FUEL	0.0372	GAL
1440	INDUSTRIAL RECIPROCATING ENGINE	268	DIESEL FUEL	0.3552	GAL
1441	INDUSTRIAL RECIPROCATING ENGINE	40	DIESEL FUEL	0.0372	GAL
1442	INDUSTRIAL RECIPROCATING ENGINE	7	GASOLINE	0.0053	GAL
1443	INDUSTRIAL RECIPROCATING ENGINE	7	GASOLINE	0.0053	GAL
1444	INDUSTRIAL RECIPROCATING ENGINE	16	DIESEL FUEL	0.0214	GAL
1447	INDUSTRIAL RECIPROCATING ENGINE	3	GASOLINE	0.0148	GAL
1448	INDUSTRIAL RECIPROCATING ENGINE	23	DIESEL FUEL	0.0204	GAL
1449	INDUSTRIAL RECIPROCATING ENGINE	16	DIESEL FUEL	0.0214	GAL
1450	INDUSTRIAL RECIPROCATING ENGINE	23	DIESEL FUEL	0.0204	GAL
1451	INDUSTRIAL RECIPROCATING ENGINE	7	GASOLINE	0.0053	GAL

Table A-2 (cont.)

AQUIS ID	Type of engine	Rated power (hp)	Fuel type	Annual fuel use (units/yr)	Unit of measure
1452	INDUSTRIAL RECIPROCATING ENGINE	7	GASOLINE	0.0053	GAL
1453	INDUSTRIAL RECIPROCATING ENGINE	7	GASOLINE	0.0053	GAL
1454	INDUSTRIAL RECIPROCATING ENGINE	7	GASOLINE	0.0053	GAL
1455	INDUSTRIAL RECIPROCATING ENGINE	4	GASOLINE	0.0037	GAL
1456	INDUSTRIAL RECIPROCATING ENGINE	4	GASOLINE	0.0037	GAL
1457	INDUSTRIAL RECIPROCATING ENGINE	4	GASOLINE	0.0037	GAL
1458	INDUSTRIAL RECIPROCATING ENGINE	4	GASOLINE	0.0037	GAL
1459	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1460	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1461	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1462	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1463	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1464	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1465	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1466	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1467	INDUSTRIAL RECIPROCATING ENGINE	230	DIESEL FUEL	0.1546	GAL
1468		280	DIESEL FUEL	0.3720	GAL
1559	INDUSTRIAL RECIPROCATING ENGINE		DIESEL FUEL	0.2	GAL
1566					
1567					
1568					
19001	INDUSTRIAL RECIPROCATING ENGINE	111	DIESEL FUEL	0.0830	GAL
19002	INDUSTRIAL RECIPROCATING ENGINE	201	DIESEL FUEL	0.1385	GAL
19003	INDUSTRIAL RECIPROCATING ENGINE	107	DIESEL FUEL	0.0810	GAL
19004	INDUSTRIAL RECIPROCATING ENGINE	107	DIESEL FUEL	0.0810	GAL
19005	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
19006	INDUSTRIAL RECIPROCATING ENGINE	91	DIESEL FUEL	0.0816	GAL
19007	INDUSTRIAL RECIPROCATING ENGINE	80	DIESEL FUEL	0.0624	GAL
19008	INDUSTRIAL RECIPROCATING ENGINE	8	DIESEL FUEL	0.0168	GAL
19009	INDUSTRIAL RECIPROCATING ENGINE	8	DIESEL FUEL	0.0168	GAL
19010	INDUSTRIAL RECIPROCATING ENGINE	2	GASOLINE	0.0151	GAL
19011	INDUSTRIAL RECIPROCATING ENGINE	6.7	GASOLINE		GAL
19012	INDUSTRIAL RECIPROCATING ENGINE	13.41	GASOLINE		GAL

Table A-3

Date: 02/18/95 KAFB AGE Sources

Aquis ID	Equipment	# units	Engine type	Fuel type	Type of fuel	Total annual fuel use (gal/yr)
1154	HEATERS	31	R	DF	GASOLINE	6055
	COOLERS	6	R	G	DIESEL	39853
	COOLERS	2	R	DF	JP-8	7365.9
	COOLERS	4	R	D		
	COOLERS	1	R	G		
	GENERATORS	41	R	DF		
	COMPRESSORS	9	R	DF		
	COMPRESSORS	16	R	G		
	COMPRESSORS	11	T	JP		
	COMPRESSORS	6	T	JP		
	HYDRAULIC TEST STANDS	1	R	DF		
	HYDRAULIC TEST STANDS	5	R	DF		
	HYDRAULIC TEST STANDS	1	R	DF		
	BOMBLIFTS	2	R	DF		
	LIGHT CARTS	11	R	G		
	LIGHT CARTS	8	R	DF		
	PRESSURE TESTERS	3	R	G		
	JACKING MANIFOLDS	1	R	DF		
	OTHER	3	R	G		
	COMPRESSORS	1	R	DF		
	OTHER	1	R	DF		
	COMPRESSORS	1	R	G		
1168	HEATERS	5	R	DF	GASOLINE	500
	GENERATORS	12	T	JP	DIESEL	5000
	GENERATORS	2	R	DF	JP-4	60000
	GENERATORS	1	T	JP		
	COMPRESSORS	1	R	G		
	COMPRESSORS	2	R	G		
	COMPRESSORS	4	R	DF		
	HYDRAULIC TEST STANDS	1	R	DF		
	HYDRAULIC TEST STANDS	1	R	DF		
	BOMBLIFTS	1	R	G		
	BOMBLIFTS	13	R	DF		
	BOMBLIFTS	8	R	DF		
	LIGHT CARTS	12	R	G		
	LIGHT CARTS	2	R	DF		
	PRESSURE TESTERS	1	R	G		
	OTHER	1	R	DF		
	OTHER	3	BRUNER	DF		
	OTHER	1	R	G		
	OTHER	1	R	G		
	OTHER	1	R	G		
1564	GENERATORS	3	R	DF	DIESEL	7560
	LIGHT CARTS	3	R	G	GASOLINE	18
	OTHER	1	R	D	JP-8	7.5
	COMPRESSORS	1	T	JP		
	COMPRESSORS	1	R	JP		
28001	LIGHT CARTS	1	R	G	DIESEL	580
	OTHER	1	R	G	GASOLINE	580

Table A-3 (cont.)

Aquis ID	Equipment	# units	Engine type	Fuel type	Type of fuel	Total annual fuel use (gal/yr)
28001	OTHER	1	R	DF		
	OTHER	1	R	DF		
	GENERATORS	1	R	DF		
	HEATERS	1	R	DF		

CO emissions from each of the engines being tested were calculated using the following equation:

emissions of CO (ton/yr) = sum of (A)(N)(EF)(T) / (2000 lb/ton)

where:

A	=	annual number of tests
N	=	number of engines per test
EF	=	emission factor (engine mode specific)
T	=	time in each mode

The number and length of actual tests done in 1994 were used to calculate actual emissions. Engine-specific emission factors were obtained for the helicopters tested by the 58th SOW. Table A-4 lists each engine tested, the time spent in each mode, and the emission factors used.

The same procedure was used to calculate the projected emissions from the 58th SOW hush house for the year 2005. It was assumed that the usage of this hush house will increase by 20% over 1994 levels in the next 10 years.

Seasonal emissions were also calculated for the hush house. The CO season is 92 days long, while the helicopters are tested throughout the 365 days of the calendar year. Therefore, seasonal emissions were determined by weighing the annual hush house emissions by the ratio of 92 to 365.

Air National Guard Hush House

Actual emissions were assumed to be the emission levels permitted in the Air National Guard hush house PSD permit. Projected emissions were also assumed to be equal to the permitted limits. Seasonal emissions were determined by weighting the annual hush house emissions by the ratio of 92 days in the CO season to 365 days a year.

Table A-4
58th SOW Hush House Emissions

Test Helicopter/Engine	Annual Number of Tests	Idle Mode (min)	Idle CO Emission (lb/hr)	Intermediate Mode (min)	Inter. CO Emissions (lb/hr)	Military Mode (min)	Military CO Emissions (lb/hr)	Actual Emissions (tpy)
UN-1N (Two Engine Helicopter)/T400								
Engine 1	100	10	4.11	25	4.39	5	0.31	0.127
Engine 2	100	15	4.11	25	4.39	0	0.31	0.143
HH53 (Single Engine Helicopter)/T64-100	25	20	14	30	3.8	10	3.2	0.089
H60 (Single Engine Helicopter)/T700-701C	45	15	14	15	3.8	30	3.2	0.136
							Total Emissions	0.495

Open Burning/Open Detonation

Actual emissions were assumed to be the emission levels permitted in the open burn/open detonation RCRA Subpart X permit. Projected emissions were also assumed to be equal to permitted limits. Seasonal emissions were determined by weighting the annual hush house emissions by the ratio of 92 days in the CO season to 365 days a year.

Appendix B

Area Source Emission Calculations

Area source emission calculations were performed using the data provided in the AEHD 1993 emission inventory. AEHD calculated woodburning emissions based on 196,439 housing units. The base has 2,700 housing units. Emissions from base housing woodburning was estimated by multiplying the emissions that the AEHD calculated by the ratio of 2,700 to 196,439. It was assumed that woodburning occurs at base housing only during the CO season and therefore the annual woodburning emissions are equal to the CO season emissions. The results of the calculations are shown below. Residential natural gas usage emissions were calculated in a similar manner. However, annual emissions were estimated conservatively by assuming that the same natural gas usage rate occurs all year. Therefore, the CO season emissions were multiplied by the ratio of 365 days per year over 92 days per CO season.

Woodburning Emissions

On-base housing units	2,700
Albuquerque Housing units	196,439
Woodburning Emissions City-wide (lb/season)	1.97E+07
Woodburning Emissions City-wide (tons/season)	9,870
On-base woodburning (tons/season) = (tons/year)	136

Residential Natural Gas Usage Emissions

10^3 ft^3/season	6,979,890
Emission Factor (lb/10^3 ft^3)	0.040
Emissions (lb/season)	2.79E+05
Emissions (tons/season)	140
On-base Emissions (tons/season)	1.92
On-base Emissions (tons/yr)	7.61

Appendix C

Motor Vehicle Emission Calculations

MOBILE 5a was used to generate the emission factors for both commuter vehicles and government owned vehicles. CO emissions from vehicles vary with the ambient temperature, fuel type, and modeled emissions year. Three sets of factors were generated for each year considered. The first emission factor is for the month of February, the second is for March through October, and the third is for the CO season (November through January). An annual average or composite emission factor was then calculated by using a weighted average of each of the three seasonal emission factors. The output files from the model are included in this appendix. The emission factors for the model's default vehicle mix are listed in Table C-1.

Table C-1
Emission Factors for Commuter Vehicles

Period for Which Factor Was Generated	Days	Emission Factor (g/mile) 1994	Emission Factor (g/mile) 2005
1 February - 28 February	28	38.0	26.8
1 March - 31 October	245	52.4	43.1
1 November - 31 January	92	37.6	25.0
Annual Emission Factor		47.6	37.3

The most recent traffic counts available (1993) were obtained from the Middle Rio Grande Council of Governments of New Mexico. A copy of their report is included in this appendix. The table below shows the counts at each gate. The traffic counts include both incoming and outgoing vehicles in a 24 hour period. It was assumed that each vehicle passes through the same gate twice during the day, therefore the number of commuters is one-half the raw count, as shown in Table C-2.

Table C-2

Commuter Traffic Emission Calculations

Route	Location of Monitor	Raw Count	Number of Commuters
Carlisle Blvd.	South of Gibson at KAFB Gate	5,665	2,833
Eubank Blvd.	North of F Street at KAFB Gate	13,019	6,510
Gibson Blvd.	East of Louisiana at KAFB Gate	23,046	11,523
Ira Sprecker St.	North of KAFB Gate	1,167	584
Truman Blvd.	South of Gibson at KAFB Gate	11,995	5,998
Wyoming Blvd.	South of San Joaquin at KAFB Gate	20,561	10,281
Total Commuters Coming onto Base			37,727

Using the number of commuters in a given day in 1993, and assuming that each commuter travels 30 miles a day, the number of miles traveled per day in 1993 was determined.

Number of Commuters per day in 1993	37,727
Number of miles traveled per vehicle per day:	30.0
Number of miles traveled per day in 1993:	1,131,795

The number of commuters in a given day in 1994 was then determined assuming a 20% increase as suggested by KAFB Civil Engineering Group.

Number of miles traveled per day in 1994:	1,358,154

The emission factor below was calculated using the MOBILE 5a model, the annual average temperatures, and a very conservative 15 miles per hour speed limit. Other details of the modeled emission rate can be found in the model output file presented at the end of this Appendix.

Composite Emission Factor for 1994 (g/mile):	47.6

The annual emissions were then calculated by multiplying the emission factor by the number of miles traveled in one year. The emission factor in grams per year was then converted to tons per year.

CO emissions for 1994 (g/year):	1.6E+10
CO emissions for 1994 (tons/year):	18,500

A similar procedure was used to calculate the emissions for the year 2005. It was assumed that commuter traffic would increase by approximately 20% over 1994 levels. The emission factor for the year 2005 is approximately 25% lower than that for 1994. Even though traffic may increase by 20% the overall emissions will actually decrease.

Number of miles traveled per day in 2005:	1,629,785
Composite Emission Factor for 2005 (g/mile):	37.3
CO emissions for 2005 (g/year):	1.58E+10
CO emissions for 2005 (tons/year):	17,400

The seasonal emissions factors were calculated using MOBILE 5a and the average ambient temperatures for November, December and January. The miles traveled were weighted by the ratio of 92 days of CO season to 365 days per year. The results are given below.

Number of miles traveled per day in the 1994 CO Season:	1,358,154
Composite Emission Factor for 1994 CO Season:	37.6
CO Emissions for 1994 (g/CO Season):	3.34E+09
CO Emissions for 1994 (tons/CO Season):	3,680

Number of miles traveled per day in the 2005 CO Season:	1,629,785
Composite Emission Factor for 2005 CO Season:	25.0
CO Emissions for 2005 (g/CO Season):	2.67E+09
CO Emissions for 2005 (tons/CO Season):	2,940

The procedures used to determine CO emissions from base assigned vehicles were the same as those for commuter vehicles. There are 1,428 base assigned vehicles (600 from SNL/DOE) and it was assumed that each of these vehicles traveled 30 miles per day in 1994. This number was increased by 20% for emissions calculations in the year 2005. The emission factors used in the calculations are presented in Table C-3, and the results are given below.

Number of miles traveled per day in 1994:	42,840
Composite Emission Factor for 1994 (g/mile):	65.8
CO emissions for 1994 (g/year):	7.32E+08
CO emissions for 1994 (tons/year):	807

Number of miles traveled per day in 2005:	51,408
Composite Emission Factor for 2005 (g/mile):	38.1
CO emissions for 2005 (g/year):	5.10E+08
CO emissions for 2005 (tons/year):	562

The seasonal emissions factors for base assigned vehicles were calculated using MOBILE 5a and the average ambient temperatures for November, December and January. The miles traveled were weighted by the ratio of 92 days of CO season to 365 days per year. The results are given below.

Number of miles traveled per day in the 1994 CO Season:	42,840
Composite Emission Factor for 1994 CO Season:	56.1
CO Emissions for 1994 (g/CO Season):	1.57E+08
CO Emissions for 1994 (tons/CO Season):	173

Number of miles traveled per day in the 2005 CO Season:	51,408
Composite Emission Factor for 2005 CO Season:	29.7
CO Emissions for 2005 (g/CO Season):	9.99E+07
CO Emissions for 2005 (tons/CO Season):	110

Table C-3
Emission Factors for Base Vehicles

Period for Which Factor Was Generated	Days	Emission Factor (g/mile) 1994	Emission Factor (g/mile) 2005
1 February - 28 February	28	55.9	30.8
1 March - 31 October	245	70.5	42.2
1 November - 31 January	92	56.1	29.7
Annual Emission Factor		65.8	38.2

Appendix D

Aircraft Emissions Calculations

Each of the groups at KAFB which maintain aircraft provided the type of aircraft used and the number of landing and take-off cycles performed by their aircraft in 1994. A list of the transient aircraft flying into the base in 1989 was also provided by the control tower (1989 was chosen because it was a representative year for typical aircraft volume; 1994 was an atypically low-volume year). Aircraft types were matched to engine type using Jane's All the World's Aircraft and the USEPA's Procedures for Emissions Inventory Preparation, 1992.

Emission factors for each type of engine were taken from several sources: Seitchek's Aircraft Engine Emissions Estimator; the Aircraft Environmental Support Office's Summary Tables of Gaseous and Particulate Emissions from Aircraft Engines, June 1990; USEPA's Compilation of Air Pollutant Emission Factors (AP-42): Volume II - Mobile Sources; and, USEPA's Procedures for Emission Inventory Preparation: Volume IV - Mobile Sources, 1992. These emission factors were in terms of pounds of CO per landing/take-off (LTO) cycle, or in terms of pounds of CO per hour in each of the aircraft engine's modes. The emission factors used for each type of aircraft/engine combination are presented in Table D-1. Tables D-2 through D-7 present a breakdown of the number and type of aircraft used by each of the aviation groups at KAFB.

An example of how annual CO emissions were calculated from aircraft follows below:

Number of transient C-12 aircraft LTOs in 1989:	229
Engine Type for C-12 Aircraft:	PT6A-41
Number of Engines per Aircraft:	2

Estimated Time in Each Engine Mode During LTO Cycle (hours/mode):

taxi in/out:	2.65E-01
takeoff:	6.67E-03
climbout:	2.00E-02
approach:	8.50E-02

CO Emission Factors (lb/hr/engine/mode):

idle:	16.95
takeoff:	2.6
climbout:	3.07
approach:	9.5

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
A-3	Turbomeca Marbore No emission factors found					
A-4	J-52-P-8B (or -408)	2	Idle	43.4	LB/HR/ENGINE	AESO
			Manual Idle	44.5		
			3000 lb thrust	24.2		
			75% Thrust	13.0		
			Normal	5.35		
			Military	5.22		
A-6	J52-P-8B	2	Idle	43.4	LB/HR/ENGINE	AESO
			Manual Idle	44.5		
			3000 lb thrust	24.2		
			75% Thrust	13.0		
			Normal	5.35		
			Military	5.22		
A-10	TF-34-100	2	Idle	41.6	LB/HR/ENGINE	SEITCHEK
			Takeoff	5.96		
			Climbout	5.96		
			Approach	15.0		
A-37	Aircraft not found					
AH-1	T53-L-703 Helicopter Emission factors not found	1				
AV-8	F402RR408 Emission factors not found	1				
				Fuel Flow (lb/hr)	Emis. Factor (lb/lb)	EPA Document Volume IV Mobile Sources
A-320 (Airbus A-320-200)	CFM56-5A GE	2	Idle	0.243	0.0180	
			Takeoff	2.38	8.30E-04	
			Climbout	1.94	8.70E-04	
			Approach	0.661	2.47E-03	
AH-124	Aircraft not found					
AERO COM	Aircraft not found					
AS-350-B2 ASTAR	ID-1D-1 No emission factors found	1				
AV-9	Aircraft not found					
B-1	F101-100	4	Idle	52.8	LB/HR/ENGINE	SEITCHEK
			Approach	60.5		
			Climbout	75.8		
			Takeoff	1,114		
B-17	Aircraft not found					
B-707	TF33102A	4	Idle	139	LB/HR/ENGINE	SEITCHEK
			Takeoff	10.6		
			Climbout	10.6		
			Approach	39.7		
B-727	JT8D-17PW	3	Idle	39.1	LB/HR/ENGINE	AP-42
			Takeoff	6.99		
			Climbout	7.91		
			Approach	20.2		
B-737	JT8D-17PW	2	Idle	39.1	LB/HR/ENGINE	AP-42
			Takeoff	6.99		
			Climbout	7.91		
			Approach	20.2		
B-747	JT9D-7R4G2	4	Idle	142	LB/HR/ENGINE	AP-42
			Takeoff	3.23		
			Climbout	6.60		

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
			Approach	44.6		
				Fuel Flow (lb/hr)	Emis. Factor (lb/ lb)	
B-767	CF6-80CZ	2	Idle	0.423	0.0480	EPA Document
	Used worst case of CF6-80C		Takeoff	4.70	5.70E-04	Volume IV
	series (CF6-80CZB2)		Climbout	3.88	5.50E-04	Mobile Sources
			Approach	1.27	2.65E-03	
Beech (Beechjet 400A)	JT15D-5 Trainer No emission factors found	2				
Bell Rang	Aircraft not found					
Bonanza (Bonanza A36)	IO-550-B Trainer No emission factors found	1				
BE-90	Aircraft not found					
C-2	TA-56-A-425 No emssion factors found	2				
C-5	TF3901C	4	Idle	75.7	LB/HR/ENGINE	SEITCHEK
			Approach	58.8		
			Takeoff	8.88		
			Climbout	8.88		
C-8	PW120A No emission factors found	2				
C-9	JT8D-9	2	Idle	50.1	LB/HR/ENGINE	SEITCHEK
			Approach	18.1		
			Takeoff	7.77		
			Climbout	7.77		
C-12	PT6A-41	2	Idle	16.9	LB/HR/ENGINE	AP-42
			Takeoff	2.60		
			Climbout	3.07		
			Approach	9.50		
C-18	TF33102A Same as B-707	4	Idle	139	LB/HR/ENGINE	SEITCHEK
			Takeoff	10.6		
			Climbout	10.6		
			Approach	39.7		
C-20	Aircraft not found					
C-21	TFE 731-2-2B	4	Idle	11.1	LB/HR/ENGINE	AP-42
			Takeoff	1.86		
			Climbout	1.80		
			Approach	9.53		
C-22	TFE 731-2-2B	4	Idle	11.1	LB/HR/ENGINE	AP-42
			Takeoff	1.86		
			Climbout	1.80		
			Approach	9.53		
C-23	PT6A-65AR No emission factors found	2				
C-25	Aircraft not found					
C-26	TPE 331	2	Idle	6.73	LB/HR/ENGINE	AP-42
			Takeoff	0.380		
			Climbout	0.510		
			Approach	3.65		
C-26A	331-12U No emission factors found	2				

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
C-130	T56-A-16	4	Idle	17.5	LB/HR/ENGINE	AP-42
			Takeoff	4.40		
			Climbout	4.60		
			Approach	3.70		
C-131	Aircraft not found					
C-135	TF33-P-5	4	Idle	74.9	LB/HR/ENGINE	AP-42
		Assumed	Takeoff	13.0		
			Climbout	13.2		
			Approach	34.2		
C-140	Aircraft not found					
C-141	TF33-P-7	4	Idle	99.5	LB/HR/ENGINE	SEITCHEK
			Approach	34.3		
			Takeoff	6.97		
			Climbout	6.97		
C-142	Aircraft not found					
C-160	RR Tyne RTY.2D MK22	2				
	No emission factors found					
C-172	Aircraft not found					
				Fuel Flow (lb/hr)	Emis. Factor (lb/lb)	
Ca-212	TPE331-10R-513C	2	Idle	0.0312	0.0615	EPA Document
(C-212)			Takeoff	0.127	7.60E-04	Volume IV
			Climbout	0.114	9.80E-04	Mobile Sources
			Approach	0.0695	6.96E-03	
C-210	TS10-520-CE	1				
	No emission factors found					
				Fuel Flow (lb/hr)	Emis. Factor (lb/lb)	
CASA	TPE331-10R-513C	2	Idle	0.0312	0.0615	EPA Document
(CASA 300 Series)	Assumed TPE331-3		Takeoff	0.127	7.60E-04	Volume IV
			Climbout	0.114	9.80E-04	Mobile Sources
			Approach	0.0695	6.96E-03	
C-550 CITATION	JT15D-4	1	Idle	19.5	LB/HR/ENGINE	AP-42
			Takeoff	1.41		
			Climbout	1.25		
			Approach	11.4		
CESSNA	O-200	1	Idle	5.31	LB/HR/ENGINE	AP-42
			Takeoff	44.0		
			Climbout	44.0		
			Approach	30.3		
CH-46	T55-L-712	2				
Seanight	Helicopter					
	No emission factors found					
CH-47	T55-L-712	2				
Chinook	Helicopter					
	No emission factors found					
CV-58	501-D22G	2				
(CV-5800)	76 Passenger					
	501-D22A					
	No emission factors found					
CON-580	501D13H	2	--	24.4	LB/LTO CYCLE	AP-42
DC-3	PT6A-65AR	2				
	Transport					
	No emission factors found					

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
DC-4	Aircraft not found					
DC-6	R2800(100)PW No emission factors found	4				
DC-8	JT3D-3B	4	Idle Approach Takeoff Climbout	139 39.7 10.6 10.6	LB/HR/ENGINE	SEITCHEK
DHC-5	T64-6E10 CT64-820-4 Transport No emission factors found	2				
DHC-8	PW120PWC No emission factors found	2				
E-2	T56-A-16 Early warning and control	2	L/S Grnd Idle H/S Grnd Idle Flight idle 75% 100% Military	18.0 4.27 3.80 0.840 1.45 1.45	LB/HR/ENGINE	SEITCHEK
E-3 (E-3A)	TF33-PW-100/100A Early warning and control	4	Idle Approach Takeoff Climbout	112 34.3 9.41 9.41	LB/HR/ENGINE	SEITCHEK
E-6	F108100 Early warning and control		Idle Approach Takeoff Climbout	25.4 9.18 8.00 8.00	LB/HR/ENGINE	SEITCHEK
F-4	J79-GE-10B	2	Idle Takeoff Climbout Approach	48.0 612 52.0 45.6	LB/HR/ENGINE	AP-42
F-5	J85-GE-21	2	Idle Approach Climbout Takeoff	92.2 73.6 75.6 282	LB/HR/ENGINE	SEITCHEK
F-14	TF30-P-412A	2	--	39.9	LB//LTO CYCLE	AP-42
F-15	F100-PW-100	2	Idle Approach Climbout Takeoff	52.8 60.5 75.8 1,114	LB/HR/ENGINE	SEITCHEK
F-16	F100PW100	1	--	27.2	LB/LTO CYCLE	AP-42
F-27	Aircraft not found					
F-86	Aircraft not found					
F-106	None listed		Total	0.0280	Metric ton/LTO cycle	SEITCHEK
F-18	F404-GE-400	2	Idle Approach Climbout Takeoff	101 13.7 9.02 843	LB/HR/ENGINE	SEITCHEK
F-111	TF-30-3	2	--	99.2	LB/LTO CYCLE	SEITCHEK
F-117	F404-F102	2	Ground idle Flight idle	85.7 101	LB/HR/ENGINE	AESO

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
			15%	40.8		
			20%	24.1		
			26%	14.0		
			37%	13.4		
			46%	7.13		
			63%	6.48		
				Fuel Flow (lb/hr)	Emis. Factor (lb/lb)	
Falcon (Falcon 900)	TFE731-5BR Business Transport Assumed TFE731-2	3	Takeoff	0.452	1.39E-03	EPA Document Volume IV Mobile Sources
			Climbout	0.381	2.03E-03	
			Approach	0.148	0.0224	
			Idle	0.0528	0.0586	
G-2	O-320 Helicopter	1	Idle	10.2	LB/HR/ENGINE	AP-42
			Takeoff	96.0		
			Climbout	66.0		
			Approach	56.8		
Gulfstream (Gulfstream IV)	MK611-8 Business Transport No emission factors found	2				
H-1	T53-L-11D	1	Idle	4.20	LB/HR/ENGINE	AP-42
			Climbout	2.00		
			Approach	2.00		
H-2	T58-GE-8F	2	Idle	23.6	LB/HR/ENGINE	AESO
			High Idle	22.7		
			Approach	10.0		
			Cruise	8.86		
			Max. Cont.	8.88		
			Takeoff	7.10		
H-3	T58-GE-8F	2	--	13.5	LB/LTO CYCLE	AP-42
H-46	Aircraft not found					
H-47	Aircraft not found					
H-52	Aircraft not found					
H-53	T64-GE-415	3	Idle	20.0	LB/HR/ENGINE	AESO
			75%	3.14		
			Normal	2.60		
			Military	2.48		
			Maximum	2.94		
H-53A (H-53E)	T64-GE-416 Helicopter No emission factors found	3				
H-53J (H-53E)	T64-GE-416 Helicopter No emission factors found	3				
H-57	Aircraft not found					
H-58	Aircraft not found					
H-60	Aircraft not found					
H-64	Aircraft not found					
H-65	Aircraft not found					
HC-130 Lockheed Model 382 Hercules (HC-130H)	T56-A-15 Cargo	4 Assumed	Idle	25.6	LB/HR/ENGINE	SEITCHEK
			Approach	18.4		
			Climbout	4.83		
			Takeoff	4.83		

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
HU-25	ATF 3-6A-4C Transport No emission factors found	2				
KC-10 (KC-10A)	CF6-50C2 Transport	3	Idle Takeoff Climbout Approach	88.0 0.380 4.70 22.7	LB/HR/ENGINE	AP-42
KC-135	T56-A-15 Transport	4	Idle Approach Takeoff Climbout	25.6 18.4 4.83 4.83	LB/HR/ENGINE	SEITCHEK
King Air	PT6A-21 Business Turboprop 10 seats No emission factors found	2				
L-21	Aircraft not found					
L-24	Aircraft not found					
L-25	Aircraft not found					
L-35	Aircraft not found					
L-60	Aircraft not found					
L-1011	None listed	3	Landing/Takeoff	199	LB/LTO CYCLE	AP-42
Lear	Aircraft not found					
Lear-22 (Assumed Lear-25)	CJ610-8A Business jet No emission factors found	2				
Lear-25	CJ610-8A Business jet No emission factors found	2				
M-576	Aircraft not found					
MC-130 (Hercules)	T56-A-15 Transport	4	Idle Approach Takeoff Climbout	25.6 18.4 4.83 4.83	LB/HR/ENGINE	
MD-80	Aircraft not found					
MU-2 (Turbomeca Adour MK 801A)	TF40-IHI-801A No emission factors found	2				
O-2 (O-2A)	IO360D		Idle Approach Takeoff Climbout	25.4 56.8 92.7 92.7	LB/HR/ENGINE	SEITCHEK
OH-58	250-C30R (T703-AD-700) Helicopter No emission factors found	1				
OV-1	T53-701 Cargo No emission factors found	2				
OV-10	T76-G-12A	2	Idle Approach Takeoff Climbout	9.28 7.74 0.989 0.989	LB/HR/ENGINE	SEITCHEK
P-2	PT6A-27 Beech B99 Airliner	2	Idle Takeoff	7.36 0.430		AP-42

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
			Climbout	0.480		
			Approach	4.95		
P-3	T56-A-7 Transport	4	--	32.4	LB/LTO CYCLE	AP-42
PA-28	0-540-J3A5D No emission factors found	2				
PB4Y	Aircraft not found					
RC-135 (U)	TF33009		Idle	148	LB/HR/ENGINE	SEITCHEK
			Approach	39.7		
			Climbout	10.6		
			Takeoff	10.6		
S-2	AE10-540-DHA5 Aerobatic Aircraft	1				
S-3	TF34-GE-400	2	Idle	35.0	LB/HR/ENGINE	AP-42
			Takeoff	9.30		
			Climbout	9.30		
			Approach	19.4		
SW-4	250-C20R Helicopter No emission factors found					
T-1	Aircraft not found					
T-2	J85-GE-2	2	Idle	62.6	LB/HR/ENGINE	AESO
			15%	80.7		
			20%	79.6		
			30%	68.5		
			40%	64.3		
			60%	60.8		
T-3	Aircraft not found					
T-4 (Kawasakil)	F3-IHI-30 No emission factors found	2				
T-33	J3335	2	Idle	152	LB/HR/ENGINE	SEITCHEK
			Approach	169		
			Takeoff	173		
			Climbout	173		
T-34	PT6A-27	1	--	1.73	LB/LTO CYCLE	AP-42
T-37	J69-25	2	Idle	29.8	LB/HR/ENGINE	SEITCHEK
			Approach	30.8		
			Takeoff	35.2		
			Climbout	35.2		
T-38	J85-5	2	Idle	80.1	LB/HR/ENGINE	SEITCHEK
			Approach	73.6		
			Climbout	76.3		
			Takeoff	216		
T-39	J60-3A	2	Idle	40.6	LB/HR/ENGINE	SEITCHEK
			Approach	26.3		
			Takeoff	11.5		
			Climbout	11.5		
T-41	0300D	1	--	26.5	LB/LTO CYCLE	SEITCHEK
T-43	JT8D-9	2	Idle	50.1	LB/HR/ENGINE	SEITCHEK
			Approach	18.1		
			Takeoff	7.77		
			Climbout	7.77		
T-44	PT6A-28	2	Landing/Takeoff	7.16	LB/LTO CYCLE	AP-42

Table D-1

Aircraft Emission Factors

Aircraft Type	Engine Type	# Engines	Mode	CO		Reference
T-45	Aircraft not found					
				Fuel Flow (lb/hr)	Emis. Factor (lb/lb)	
T-47	JT15D-4B	2	Takeoff	0.326	2.65E-03	EPA Document
Cessna Model 552 (T-47A)	Assumed JT15D-1		Climbout	0.273	3.50E-03	Volume IV
			Approach	0.113	0.0405	Mobile Sources
			Idle	0.0507	0.132	
T-114	Aircraft not found					
T-144	Aircraft not found					
TV-7	Aircraft not found					
U-8	Aircraft not found					
U-12	Aircraft not found					
U-21 (U-21F)	PT6A-28 Transport	2	Landing/Takeoff	7.16	LB/LTO CYCLE	AP-42
UH-1 (Bell Model 205)	T53-L-703 Helicopter No emission factors found	1				
UH-60A Black Hawk	T700-GE-701C Helicopter No emission factors found	2				
UV-18	PT6A-27 Transport	2	Idle	7.36	LB/HR/ENGINE	AP-42
			Takeoff	0.430		
			Climbout	0.480		
			Approach	4.95		
VC-10	D-25V Helicopter No emission factors found	2				
VC-137	JT3D-3B	4	Idle	139	LB/HR/ENGINE	SEITCHEK
			Approach	39.7		
			Takeoff	10.6		
			Climbout	10.6		
WC-135	Aircraft not found					
2 NKC-135ES	TF-33-PW102	4	Taxi In/Out	139	LB/HR/ENGINE	SEITCHEK
			Take off	10.6		
			Climbout	10.6		
			Approach	39.7		

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
A-3	Turbomeca Marbore No emission factors found	Taxi In/Out Take off Climbout Approach		3	0.0702	****
A-4	J-52-P-8B (or -408)	Taxi In/Out	0.497	413	8.90	
		Take off	6.67E-03		0.0144	
		Climbout	0.0133		0.0287	
		Approach	0.0583		0.129	
A-6	J52-P-8B	Taxi In/Out	0.497	87	1.87	
		Take off	6.67E-03		3.03E-03	
		Climbout	0.0133		6.06E-03	
		Approach	0.0583		0.0272	
A-10	TF-34-100	Taxi In/Out	0.497	203	4.20	
		Take off	6.67E-03		8.07E-03	
		Climbout	0.0133		0.0161	
		Approach	0.0583		0.178	
A-37	Aircraft not found	Taxi In/Out Take off Climbout Approach		40	0.936	****
AH-1	T53-L-703 No emission factors found	Taxi In/Out Take off Climbout Approach		10	0.234	****
AV-8	F402RR408 No emission factors found	Taxi In/Out Take off Climbout Approach		150	3.51	****
B-1	F101-100	Taxi In/Out	0.497	1	0.0525	
		Take off	6.67E-03		0.0149	
		Climbout	0.0133		2.02E-03	
		Approach	0.0583		7.06E-03	
B-707	TF33102A	Taxi In/Out	0.433	1	0.120	
		Take off	0.0117		2.47E-04	
		Climbout	0.0367		7.77E-04	
		Approach	0.0667		5.30E-03	
B-727	JT8D-17PW	Taxi In/Out	0.433	4	0.102	
		Take off	0.0117		4.89E-04	
		Climbout	0.0367		1.74E-03	
		Approach	0.0667		8.09E-03	
B-737	JT8D-17PW	Taxi In/Out	0.433	5	0.0847	
		Take off	0.0117		4.08E-04	
		Climbout	0.0367		1.45E-03	
		Approach	0.0667		6.74E-03	
B-747	JT9D-7R4G2	Taxi In/Out	0.433	2	0.247	
		Take off	0.0117		1.51E-04	
		Climbout	0.0367		9.68E-04	
		Approach	0.0667		0.0119	
B-767	CF6-80CZ Used worst case of CF6-80 series (CF6-80CZB2)	Taxi In/Out	0.433	3	2.64E-05	
		Take off	0.0117		9.37E-08	
		Climbout	0.0367		2.35E-07	
		Approach	0.0667		6.74E-07	
Beech	JT15D-5 Trainer No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
Bell Rang	Aircraft not found	Taxi In/Out Take off Climbout Approach		4	0.0936	****
Bonanza	IO-550-B Trainer No emission factors found	Taxi In/Out Take off Climbout Approach		3	0.0702	****
C-2	TA-56-A-425 No emission factors found	Taxi In/Out Take off Climbout Approach		7	0.164	****
C-5	TF3901C	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	13	0.522 1.54E-03 4.62E-03 0.130	
C-8	PW120A No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
C-9	JT8D-9	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	184	2.44 9.53E-03 0.0286 0.283	
C-12	PT6A-41	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	229	1.03 3.97E-03 0.0141 0.185	
C-18	TF33102A Same as B-707	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	1	0.0736 1.41E-04 4.24E-04 6.76E-03	
C-21	TFE 731-2-2B	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	249	1.47 6.18E-03 0.0179 0.403	
C-22	TFE 731-2-2B	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	7	0.0412 1.74E-04 5.04E-04 0.0113	
C-23	PT6A-65AR No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
C-130	T56-A-16	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	249	2.31 0.0146 0.0458 0.157	
C-131	Aircraft not found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
C-135	TF33-P-5	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	21	0.834 3.64E-03 0.0111 0.122	

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
C-140	Aircraft not found	Taxi In/Out Take off Climbout Approach		6	0.140	****
C-141	TF33-P-7	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	207	10.9 0.0192 0.0577 1.21	
C-160	RR Tyne RTY.2D MK22 No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
C-172	Aircraft not found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
Ca-212	TPE331-10R-513C	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	1	5.08E-07 6.44E-10 2.23E-09 4.11E-08	
Casa	TPE331-10R-513C	Taxi In/Out Take off Climbout Approach	0.265 6.67E-03 0.0200 0.0850	1	5.08E-07 6.44E-10 2.23E-09 4.11E-08	
CESSNA	O-200	Taxi In/Out Take off Climbout Approach	0.267 5.00E-03 0.0833 0.100	1	7.08E-04 1.10E-04 1.83E-03 1.51E-03	All Cessnas assumed to be identical
Cessna 150	O-200	Taxi In/Out Take off Climbout Approach	0.267 5.00E-03 0.0833 0.100	1	7.08E-04 1.10E-04 1.83E-03 1.51E-03	
Cessna 206	O-200	Taxi In/Out Take off Climbout Approach	0.267 5.00E-03 0.0833 0.100	1	7.08E-04 1.10E-04 1.83E-03 1.51E-03	
Cessna 172	O-200	Taxi In/Out Take off Climbout Approach	0.267 5.00E-03 0.0833 0.100	1	7.08E-04 1.10E-04 1.83E-03 1.51E-03	
Citation	None listed	Taxi In/Out Take off Climbout Approach	0.217 6.67E-03 8.33E-03 0.0267	1	2.11E-03 4.70E-06 5.21E-06 1.53E-04	
CH-46	T55-L-712 No emission factors found	Taxi In/Out Take off Climbout Approach		8	0.187	****
CH-47	T55-L-712 No emission factors found	Taxi In/Out Take off Climbout Approach		8	0.187	****
CV-58	501-D22G No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
DC-3	PT6A-65AR No emission factors found	Taxi In/Out Take off Climbout Approach		2	0.0468	****
DC-8	JT3D-3B	Taxi In/Out	0.433	2	0.241	
		Take off	0.0117		4.94E-04	Assumed Civilian
		Climbout	0.0367		1.55E-03	Mid Range Jet
		Approach	0.0667		0.0106	
DH-5	T64-6E10 No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
E-2	T56-A-16	Taxi In/Out	0.217	13	0.0508	
		Take off	6.67E-03		1.26E-04	
		Climbout	8.33E-03		1.57E-04	Assumed Approach =
		Approach	0.0267		1.32E-03	Flight Idle
E-3	TF33-PW-100/100A	Taxi In/Out	0.217	2	0.0967	
		Take off	6.67E-03		2.51E-04	
		Climbout	8.33E-03		3.14E-04	
		Approach	0.0267		3.65E-03	
F-4	J79-GE-10B	Taxi In/Out	0.497	737	17.6	
		Take off	6.67E-03		3.01	
		Climbout	0.0133		0.511	
		Approach	0.0583		1.96	
F-5	J85-GE-21	Taxi In/Out	0.497	31	1.42	
		Take off	6.67E-03		0.0584	
		Climbout	0.0133		0.0312	
		Approach	0.0583		0.133	
F-14	TF30-P-412A	Taxi In/Out	0.497	216	4.31	Emission Factor Based on LTO Cycle
		Take off	6.67E-03			
		Climbout	0.0133			
		Approach	0.0583			
F-15	F100-PW-100	Taxi In/Out	0.497	39	1.02	
		Take off	6.67E-03		0.290	
		Climbout	0.0133		0.0394	
		Approach	0.0583		0.138	
F-16	F100PW100	Taxi In/Out	0.497	209	2.84	Emission Factor Based on LTO Cycle
		Take off	6.67E-03			
		Climbout	0.0133			
		Approach	0.0583			
F-18	F404-GE-400	Taxi In/Out	0.497	520	26.0	
		Take off	6.67E-03		2.92	
		Climbout	0.0133		0.0625	
		Approach	0.0583		0.415	
F-27	Aircraft not found	Taxi In/Out	0.497	5	0.117	****
		Take off	6.67E-03			
		Climbout	0.0133			
		Approach	0.0583			
F-86	Aircraft not found	Taxi In/Out	0.497	18	0.421	****
		Take off	6.67E-03			
		Climbout	0.0133			
		Approach	0.0583			
F-106	None listed	Taxi In/Out	0.497	1	0.0309	Emission Factor Based on LTO Cycle
		Take off	6.67E-03			
		Climbout	0.0133			
		Approach	0.0583			

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
F-111	TF-30-3	Taxi In/Out	0.497	74	3.67	Emission Factor Based on LTO Cycle
		Take off	6.67E-03			
		Climbout	0.0133			
		Approach	0.0583			
Falcon	TFE731-5BR	Taxi In/Out	0.217	1	1.01E-06	
		Take off	6.67E-03		6.28E-09	
		Climbout	8.33E-03		9.68E-09	
		Approach	0.0267		1.32E-07	
G-2	O-320	Taxi In/Out	0.250	2	2.55E-03	
		Take off	N/A		0	
		Climbout	0.113		7.48E-03	
		Approach	0.113		6.44E-03	
Gulfstream	MK611-8	Taxi In/Out	0.217	4	0.0936	****
	No emission factors found	Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
H-3	T58-GE-8F	Taxi In/Out	0.250	27	0.183	Emission Factor Based on LTO Cycle
		Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
H-46	Aircraft not found	Taxi In/Out	0.250	6	0.140	****
		Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
H-52	Aircraft not found	Taxi In/Out	0.250	1	0.0234	****
		Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
H-53	T64-GE-415	Taxi In/Out	0.250	55	0.413	Emission Factor Based on LTO Cycle
		Take off	N/A			
		Climbout	0.113		0.0232	
		Approach	0.113		0.0294	Assumed 75%
H-57	Aircraft not found	Taxi In/Out	0.250	1	0.0234	****
		Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
H-64	Aircraft not found	Taxi In/Out	0.250	2	0.0468	****
		Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
H-65	Aircraft not found	Taxi In/Out	0.250	1	0.0234	****
		Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
HU-25	ATF 3-6A-4C	Taxi In/Out	0.265	1	0.0234	****
	No emission factors found	Take off	6.67E-03			
		Climbout	0.0200			
		Approach	0.0850			
KC-10	CF6-50C2	Taxi In/Out	0.265	10	0.350	
		Take off	6.67E-03		3.80E-05	
		Climbout	0.0200		1.41E-03	
		Approach	0.0850		0.0289	
KC-135	T56-A-15	Taxi In/Out	0.795	25	1.02	
		Take off	0.0117		2.82E-03	
		Climbout	0.0267		6.44E-03	
		Approach	0.0867		0.0799	

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
King Air	PT6A-21	Taxi In/Out	0.433	2	0.0468	****
	No emission factors found	Take off	8.33E-03			
		Climbout	0.0417			
		Approach	0.0750			
L-1011	None listed	Taxi In/Out	0.433	4	0.399	Emission Factor Based on LTO Cycle
		Take off	0.0117			
		Climbout	0.0367			
		Approach	0.0667			
L-21	Aircraft not found	Taxi In/Out	0.217	1	0.0234	****
		Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
L-24	Aircraft not found	Taxi In/Out	0.217	10	0.234	****
		Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
L-25	Aircraft not found	Taxi In/Out	0.217	7	0.164	****
		Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
L-35	Aircraft not found	Taxi In/Out	0.217	1	0.0234	****
		Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
Lear	Aircraft not found	Taxi In/Out	0.217	5	0.117	****
		Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
Lear-22	CJ610-8A	Taxi In/Out	0.217	1	0.0234	****
	No emission factors found	Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
Lear-25	CJ610-8A	Taxi In/Out	0.217	1	0.0234	****
	No emission factors found	Take off	6.67E-03			
		Climbout	8.33E-03			
		Approach	0.0267			
MC-130	T56-A-15	Taxi In/Out	0.265	3	0.0407	
		Take off	6.67E-03		1.93E-04	
		Climbout	0.0200		5.80E-04	
		Approach	0.0850		9.40E-03	
MU-2	TF40-IHI-801A	Taxi In/Out		6	0.140	****
	No emission factors found	Take off				
		Climbout				
		Approach				
O-2	IO360D	Taxi In/Out		1	0.0234	****
	No emission factors found	Take off				
		Climbout				
		Approach				
OH-58	250-C30R (T703-AD-700)	Taxi In/Out	0.250	5	0.117	****
	No emission factors found	Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
OV-1	T53-701	Taxi In/Out		1	0.0234	****
	No emission factors found	Take off				
		Climbout				
		Approach				

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
OV-10	T76-G-12A	Taxi In/Out	0.497	75	0.346	
		Take off	6.67E-03		4.94E-04	
		Climbout	0.0133		9.89E-04	
		Approach	0.0583		0.0339	
P-3	T56-A-7	Taxi In/Out	0.265	52	0.841	Emission Factor Based on LTO Cycle
		Take off	6.67E-03			
		Climbout	0.0200			
		Approach	0.0850			
PA-28	0-540-J3A5D	Taxi In/Out		1	0.0234	****
	No emission factors found	Take off				
		Climbout				
		Approach				
RC-135	TF33009	Taxi In/Out		1	0.0234	****
	No emission factors found	Take off				
		Climbout				
		Approach				
S-2	AE10-540-DHA5	Taxi In/Out		1	0.0234	****
	No emission factors found	Take off				
		Climbout				
		Approach				
S-3	TF34-GE-400	Taxi In/Out	0.497	9	0.156	
		Take off	6.67E-03		5.58E-04	
		Climbout	0.0133		1.12E-03	
		Approach	0.0583		0.0102	
SW-4	250-C20R	Taxi In/Out	0.250	26	0.608	****
	No emission factors found	Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
T-2	J85-GE-2	Taxi In/Out	0.187	82	1.92	****
	No emission factors found	Take off	8.33E-03			
		Climbout	0.0233			
		Approach	0.0667			
T-33	J3335	Taxi In/Out	0.187	5	0.142	****
		Take off	8.33E-03		7.20E-03	
		Climbout	0.0233		0.0202	
		Approach	0.0667		0.0564	
T-34	PT6A-27	Taxi In/Out	0.187	49	0.0424	Emission Factor Based on LTO Cycle
		Take off	8.33E-03			
		Climbout	0.0233			
		Approach	0.0667			
T-37	J69-25	Taxi In/Out	0.187	710	3.95	
		Take off	8.33E-03		0.208	
		Climbout	0.0233		0.583	
		Approach	0.0667		1.46	
T-38	J85-5	Taxi In/Out	0.187	1338	20.0	
		Take off	8.33E-03		2.41	
		Climbout	0.0233		2.38	
		Approach	0.0667		6.57	
T-39	J60-3A	Taxi In/Out	0.320	38	0.494	
		Take off	6.67E-03		2.92E-03	
		Climbout	0.0200		8.76E-03	
		Approach	0.0850		0.0848	
T-4	F3-IHI-30	Taxi In/Out	0.187	2	0.0468	****
	No emission factors found	Take off	8.33E-03			
		Climbout	0.0233			
		Approach	0.0667			

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
T-41	0300D	Taxi In/Out	0.187	3	0.0397	Emission Factor Based on LTO Cycle
		Take off	8.33E-03			
		Climbout	0.0233			
		Approach	0.0667			
T-43	JT8D-9	Taxi In/Out	0.187	18	0.168	
		Take off	8.33E-03		1.17E-03	
		Climbout	0.0233		3.26E-03	
		Approach	0.0667		0.0217	
T-44	PT6A-28	Taxi In/Out	0.187	83	0.297	Emission Factor Based on LTO Cycle
		Take off	8.33E-03			
		Climbout	0.0233			
		Approach	0.0667			
T-47	JT15D-4B	Taxi In/Out	0.187	14	1.75E-05	
		Take off	8.33E-03		1.01E-07	
		Climbout	0.0233		3.13E-07	
		Approach	0.0667		4.25E-06	
T-114	Aircraft not found	Taxi In/Out	0.187	1	0.0234	****
		Take off	8.33E-03			
		Climbout	0.0233			
		Approach	0.0667			
T-144	Aircraft not found	Taxi In/Out		3	0.0702	****
		Take off				
		Climbout				
		Approach				
TV-7	Aircraft not found	Taxi In/Out		1	0.0234	****
		Take off				
		Climbout				
		Approach				
U-8	Aircraft not found	Taxi In/Out		2	0.0468	****
		Take off				
		Climbout				
		Approach				
U-12	Aircraft not found	Taxi In/Out		1	0.0234	****
		Take off				
		Climbout				
		Approach				
U-21	PT6A-28	Taxi In/Out	0.265	75	0.269	Emission Factor Based on LTO Cycle
		Take off	6.67E-03			
		Climbout	0.0200			
		Approach	0.0850			
UH-1	T53-L-703	Taxi In/Out	0.250	67	1.57	****
	No emission factors found	Take off	N/A			
		Climbout	0.113			
		Approach	0.113			
UH-60	T700-GE-701C	Taxi In/Out	0.250	50	1.17	****
	No emission factors found	Take off	----			
		Climbout	0.113			
		Approach	0.113			
UV-18	PT6A-27	Taxi In/Out	0.265	12	0.0234	
		Take off	6.67E-03		3.44E-05	
		Climbout	0.0200		1.15E-04	
		Approach	0.0850		5.05E-03	
VC-10	D-25V	Taxi In/Out	0.250	11	0.257	****
	No emission factors found	Take off	----			
		Climbout	0.113			
		Approach	0.113			

Table D-2

Transient Aircraft

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	Comments
VC-137	JT3D-3B No emission factors found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
WC-135	Aircraft not found	Taxi In/Out Take off Climbout Approach		1	0.0234	****
					162	**Total Tons CO/yr**
					0.0234	Average Emission Factor (Ton/LTO cycle)

**** Represents CO/yr numbers calculated by using an average emission factor which was 0.0234 Ton/LTO cycle

Table D-3

58th SOW LTO's

Aircraft Type	Engine Type	Mode	Time In Mode (hours)	LTO Cycles	CO Ton/yr	Comments
H-1	T53-L-11D	Taxi In/Out	0.250	1232	0.647	
		Climbout	0.113		0.140	
		Approach	0.113		0.140	
H-60	Aircraft not found	Taxi In/Out		1878	15.5	****
		Climbout				
		Approach				
H-53A	T64-GE-416	Taxi In/Out	0.250	670	5.03	
	Helicopter	Climbout	0.113		0.282	
		Approach	0.113		0.358	
H-53-J	T64-GE-416	Taxi In/Out	0.250	781	5.86	
	Helicopter	Climbout	0.113		0.329	
		Approach	0.113		0.417	
HC-130	T56-A-15	Taxi In/Out	0.265	718	9.74	
	Cargo	Take off	6.67E-03		0.176	
		Climbout	0.0200		0.139	
		Approach	0.0850		0.590	
MC-130	T56-A-15	Taxi In/Out	0.265	497	6.74	
	Transport	Take off	6.67E-03		0.0320	
		Climbout	0.0200		0.0960	
		Approach	0.0850		1.56	
					47.8	**Total Tons CO/yr**

**** Represents CO/yr numbers calculated by using an average emission factor which was 8.28E-3 Ton/LTO cycle

Average Emission Factor Calculation:

Total Emissions aircraft with known emission factors:	32.3
Total Number of LTO cycles for aircraft with known emission factors:	3,898
^Average Emission Factor (Tons/LTO Cycle):	8.28E-03

Table D-4

NMANG LTO's

Aircraft Type	Engine Type	Mode	Time In Mode (hours)	LTO Cycles	CO Tons/yr	
F-16	F100PW100	Taxi In/Out		4843	65.9	Emission Factor based on LTO Cycl
		Take off				
		Climbout				
		Approach				
C-26A	331-12U	Taxi In/Out	0.265	347	0.619	
		Take off	6.67E-03		8.79E-04	
		Climbout	0.0200		3.54E-03	
		Approach	0.0850		0.108	
					66.6	**Total Tons CO/yr**

Table D-5

US Customs

Aircraft Type	Engine Type	Mode	Time In Mode (hours)	LTO Cycles	CO Tons/yr	Comments
C-550 Citation Jet	JT15D-4	Taxi In/Out	0.217	447	0.942	
		Take off	6.67E-03		2.10E-03	
		Climbout	8.33E-03		2.33E-03	
		Approach	0.0267		0.0682	
C-12C King Air	PT6A-41	Taxi In/Out	0.265	274	1.23	
		Take off	6.67E-03		4.75E-03	
		Climbout	0.0200		0.0168	
		Approach	0.0850		0.221	
UH60A Black Hawk	T700	Taxi In/Out		176	0.607	****
		Take off				
		Climbout				
		Approach				
C-210	CS10-520-CE	Taxi In/Out		220	0.759	****
		Take off				
		Climbout				
		Approach				
AS-350-B2	ID-1D1	Taxi In/Out		290	1.00	****
		Take off				
		Climbout				
		Approach				
					4.86	**Total Tons CO/yr**

**** Represents CO/yr numbers calculated by using an average emission factor which was 3.45E-03 Ton/LTO cycle

Average Emission Factor Calculation:

Total Emissions aircraft with known emission factors:	2.5
Total Number of LTO cycles for aircraft with known emission factors:	721
^Average Emission Factor (Tons/LTO Cycle):	3.45E-03

Table D-6

US Forest Service

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	
P-3	T56-A-7	Taxi In/Out		156	2.52	Emission Factor based on LTO Cycle
	Transport	Take off				
		Climbout				
		Approach				
C-130	T56-A-16	Taxi In/Out	0.265	156	1.45	
		Take off	6.67E-03		9.15E-03	
		Climbout	0.0200		0.0287	
		Approach	0.0850		0.0981	
PB4Y	Aircraft not found			156	2.33	****
P2	PT6A-27	Taxi In/Out	0.433	156	0.498	
		Take off	8.33E-03		5.59E-04	
		Climbout	0.0417		3.12E-03	
		Approach	0.0750		0.0579	
DC4	Aircraft not found			156	2.33	****
DC6	R2800(100)PW			156	2.33	****
	No emission factors found					
					11.67	**Total Tons CO/yr**
					1.50E-02	Ton/LTO cycle

**** Represents CO/yr numbers calculated by using an average emission factor which was 1.50 E-3 Ton/LTO cycle

Average Emission Factor Calculation:

Total Emissions aircraft with known emission factors:	4.67
Total Number of LTO cycles for aircraft with known emission factors:	312
^Average Emission Factor (Tons/LTO Cycle):	1.50E-02

Table D-6

US Forest Service

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	
P-3	T56-A-7	Taxi In/Out		156	2.52	Emission Factor based on LTO Cycle
	Transport	Take off				
		Climbout				
		Approach				
C-130	T56-A-16	Taxi In/Out	0.265	156	1.45	
		Take off	6.67E-03		9.15E-03	
		Climbout	0.0200		0.0287	
		Approach	0.0850		0.0981	
PB4Y	Aircraft not found			156	2.33	****
P2	PT6A-27	Taxi In/Out	0.433	156	0.498	
		Take off	8.33E-03		5.59E-04	
		Climbout	0.0417		3.12E-03	
		Approach	0.0750		0.0579	
DC4	Aircraft not found			156	2.33	****
DC6	R2800(100)PW			156	2.33	****
	No emission factors found					
					11.67	**Total Tons CO/yr**
					1.50E-02	Ton/LTO cycle

**** Represents CO/yr numbers calculated by using an average emission factor which was 1.50 E-3 Ton/LTO cycle

Average Emission Factor Calculation:

Total Emissions aircraft with known emission factors:	4.67
Total Number of LTO cycles for aircraft with known emission factors	312
^Average Emission Factor (Tons/LTO Cycle):	1.50E-02

Table D-7

DET 2

Aircraft Type	Engine Type	Mode	Time In Mode (hours/cycle)	LTO's Cycles/yr	CO Tons/yr	
2 NKC-135ES	TF-33-PW102	Taxi In/Out	0.433	35	4.21	
		Take off	0.0117		8.65E-03	
		Climbout	0.0367		0.0272	
		Approach	0.0667		0.185	
					4.43	**Total Tons CO/yr**

Therefore, the CO emissions from the transient C-12 aircraft are calculated as follows:

$$229 * 2 * [(2.65E\text{-}01)(16.95) + (6.67E\text{-}03)(2.6) + (2.00E\text{-}02)(3.07) + (8.50E\text{-}02)(9.5)]$$

$$= \quad 2{,}463 \text{ lb/yr CO}$$

$$= \quad 1.23 \text{ ton/yr CO}$$

When times in each engine mode were not known for a particular aircraft type, average mode times for LTO cycles were taken out of AP-42 or the Procedures for Emission Inventory Preparation.

The same procedure was used to calculate the projected emissions from aircraft for the year 2005. It was assumed that aircraft volume will increase by approximately 20% over 1994 levels.

Seasonal emissions were also calculated for aircraft. The CO season is 92 days long, while aircraft are flown throughout the 365 days of the calendar year. Therefore, seasonal emissions were determined by weighing the annual aircraft emissions by the ratio of 92 to 365.

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ing receipt of the grant under this paragraph, and shall supplement any funds available under Federal law to such organization for transportation or air quality maintenance planning. Grants under this section shall not be used for construction.

(July 14, 1955, ch. 360, title I, § 175, as added Aug. 7, 1977, Pub.L. 95–95, title I, § 129(b), 91 Stat. 749.)

Code of Federal Regulations

Implementation plans, generally, see 40 CFR 51.40 et seq.

Library References

Health and Environment ⇐25.6(1).
United States ⇐82(2).
C.J.S. Health and Environment § 91 et seq.
C.J.S. United States § 122.

§ 7505a. Maintenance plans [CAA § 175A]

(a) Plan revision

Each State which submits a request under section 7407(d) of this title for redesignation of a nonattainment area for any air pollutant as an area which has attained the national primary ambient air quality standard for that air pollutant shall also submit a revision of the applicable State implementation plan to provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation. The plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance.

(b) Subsequent plan revisions

8 years after redesignation of any area as an attainment area under section 7407(d) of this title, the State shall submit to the Administrator an additional revision of the applicable State implementation plan for maintaining the national primary ambient air quality standard for 10 years after the expiration of the 10–year period referred to in subsection (a) of this section.

(c) Nonattainment requirements applicable pending plan approval

Until such plan revision is approved and an area is redesignated as attainment for any area designated as a nonattainment area, the requirements of this part shall continue in force and effect with respect to such area.

(d) Contingency provisions

Each plan revision submitted under this section shall contain such contingency provisions as the Administrator deems necessary to assure that the State will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area. Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area. The failure of any area redesignated as an attainment area to maintain the national ambient air quality standard concerned shall not result in a requirement that the State revise its State implementation plan unless the Administrator, in the Administrator's discretion, requires the State to submit a revised State implementation plan.

(July 14, 1955, ch. 360, title I, § 175A, as added Nov. 15, 1990, Pub.L. 101–549, title I, § 102(e), 104 Stat. 2418.)

Effective Date

Section to take effect Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

CONFORMITY

§ 7506. Limitations on certain Federal assistance [CAA § 176]

(a), (b) Repealed. Pub.L. 101–549, Title I, § 110(4), Nov. 15, 1990, 104 Stat. 2470

(c) Activities not conforming to approved or promulgated plans

(1) No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under section 7410 of this title. No metropolitan planning organization designated under section 134 of Title 23, shall give its approval to any project, program, or plan which does not conform to an implementation plan approved or promulgated under section 7410 of this title. The assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to an implementation plan means—

(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not—

CAA CONFORMITY

(i) cause or contribute to any new violation of any standard in any area;

(ii) increase the frequency or severity of any existing violation of any standard in any area; or

(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

The determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates as determined by the metropolitan planning organization or other agency authorized to make such estimates.

(2) Any transportation plan or program developed pursuant to Title 23 or the Urban Mass Transportation Act [49 U.S.C.A. App. § 1601 et seq.] shall implement the transportation provisions of any applicable implementation plan approved under this chapter applicable to all or part of the area covered by such transportation plan or program. No Federal agency may approve, accept or fund any transportation plan, program or project unless such plan, program or project has been found to conform to any applicable implementation plan in effect under this chapter. In particular—

(A) no transportation plan or transportation improvement program may be adopted by a metropolitan planning organization designated under Title 23 or the Urban Mass Transportation Act [49 U.S.C.A.App. § 1601 et seq.], or be found to be in conformity by a metropolitan planning organization until a final determination has been made that emissions expected from implementation of such plans and programs are consistent with estimates of emissions from motor vehicles and necessary emissions reductions contained in the applicable implementation plan, and that the plan or program will conform to the requirements of paragraph (1)(B);

(B) no metropolitan planning organization or other recipient of funds under Title 23 or the Urban Mass Transportation Act [49 U.S.C.A.App. § 1601 et seq.] shall adopt or approve a transportation improvement program of projects until it determines that such program provides for timely implementation of transportation control measures consistent with schedules included in the applicable implementation plan;

(C) a transportation project may be adopted or approved by a metropolitan planning organization or any recipient of funds designated under Title 23 or the Urban Mass Transportation Act [49 U.S.C.A.App. § 1601 et seq.], or found in conformity by a metropolitan planning organization or approved, accepted, or funded by the Department of Transportation only if it meets either the requirements of subparagraph (D) or the following requirements—

(i) such a project comes from a conforming plan and program;

(ii) the design concept and scope of such project have not changed significantly since the conformity finding regarding the plan and program from which the project derived; and

(iii) the design concept and scope of such project at the time of the conformity determination for the program was adequate to determine emissions.

(D) Any project not referred to in subparagraph (C) shall be treated as conforming to the applicable implementation plan only if it is demonstrated that the projected emissions from such project, when considered together with emissions projected for the conforming transportation plans and programs within the nonattainment area, do not cause such plans and programs to exceed the emission reduction projections and schedules assigned to such plans and programs in the applicable implementation plan.

(3) Until such time as the implementation plan revision referred to in paragraph (4)(C) is approved conformity of such plans, programs, and projects will be demonstrated if—

(A) the transportation plans and programs—

(i) are consistent with the most recent estimates of mobile source emissions;

(ii) provide for the expeditious implementation of transportation control measures in the applicable implementation plan; and

(iii) with respect to ozone and carbon monoxide nonattainment areas, contribute to annual emissions reductions consistent with sections 7511a(b)(1) and 7512a(a)(7) of this title; and

(B) the transportation projects—

(i) come from a conforming transportation plan and program as defined in subparagraph (A) or for 12 months after November 15, 1990, from a transportation program found to conform within 3 years prior to November 15, 1990; and

(ii) in carbon monoxide nonattainment areas, eliminate or reduce the severity and number of violations of the carbon monoxide standards in the area substantially affected by the project.

With regard to subparagraph (B)(ii), such determination may be made as part of either the conformity determination for the transportation program or for the individual project taken as a whole during the environmental review phase of project development.

(4)(A) No later than one year after November 15, 1990, the Administrator shall promulgate criteria and procedures for determining conformity (except in the case of transportation plans, programs, and projects) of and for keeping the Administrator informed about, the activities referred to in paragraph (1). No later than one year after November 15, 1990, the Administrator, with the concurrence of the Secretary of Transportation, shall promulgate criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects. A suit may be brought against the Administrator and the Secretary of Transportation under section 7604 of this title to compel promulgation of such criteria and procedures and the Federal district court shall have jurisdiction to order such promulgation.

(B) The procedures and criteria shall, at a minimum—

(i) address the consultation procedures to be undertaken by metropolitan planning organizations and the Secretary of Transportation with State and local air quality agencies and State departments of transportation before such organizations and the Secretary make conformity determinations;

(ii) address the appropriate frequency for making conformity determinations, but in no case shall such determinations for transportation plans and programs be less frequent than every three years; and

(iii) address how conformity determinations will be made with respect to maintenance plans.

(C) Such procedures shall also include a requirement that each State shall submit to the Administrator and the Secretary of Transportation within 24 months of November 15, 1990 a revision to its implementation plan that includes criteria and procedures for assessing the conformity of any plan, program, or project subject to the conformity requirements of this subsection.

(d) Priority of achieving and maintaining national primary ambient air quality standards

Each department, agency, or instrumentality of the Federal Government having authority to conduct or support any program with air- quality related transportation consequences shall give priority in the exercise of such authority, consistent with statutory requirements for allocation among States or other jurisdictions, to the implementation of those portions of plans prepared under this section to achieve and maintain the nation: primary ambient air quality standard. This paragraph extends to, but is not limited to, authority exercised under the Urban Mass Transportation Act [49 U.S.C.A.App. § 1601 et seq.], Title 23, and the Housing and Urban Development Act.

(July 14, 1955, ch. 360, title I, § 176, as added Aug. 7, 1977, Pub.L. 95–95, title I, § 129(b), 91 Stat. 749, and amended Nov. 16, 1977, Pub.L. 95–190, § 14(a)(59), 91 Stat. 1403; Nov. 15, 1990, Pub.L. 101–549, title I, §§ 101(f), 110(4), 104 Stat. 2409, 2470.)

References in Text.

Title 23, referred to in subsec. (c)(2), (2)(A)–(C), is Title 23, Highways.

The Urban Mass Transportation Act, referred to in subsec. (c)(2), (2)(A)–(C), probably means the Urban Mass Transportation Act of 1964, Pub.L. 88–365, July 9, 1964, 78 Stat. 302, as amended, which is classified generally to chapter 21 (section 1601 et seq.) of Title 49, Transportation, Appendix. For complete classification of this Act to the Code, see Short Title note set out under section 1601 of Title 49, Appendix, and Tables.

Effective Date of 1990 Amendment

Amendment by Pub.L. 101–549 effective Nov. 15, 1990, except as otherwise provided, see section 711(b) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Savings Provisions

Suits, actions or proceedings commenced under this chapter as in effect prior to Nov. 15, 1990, not to abate by reason of the taking effect of amendments by Pub.L. 101–549, except as otherwise provided for, see section 711(a) of Pub.L. 101–549, set out as a note under section 7401 of this title.

Code of Federal Regulations

Air quality conformity and priority procedures, see 23 CFR 770.1 et seq.
Implementation plans generally, see 40 CFR 51.40 et seq.
Planning assistance and standards, see 23 CFR 450.100 et seq., 49 CFR 613.[illegible] et seq.

§ 7506a. Interstate transport commissions [CAA § 176A]

(a) Authority to establish interstate transport regions

Whenever, on the Administrator's own motion or by petition from the Governor of any State, the Administrator has reason to believe that the interstate transport of air pollutants from one or more States contributes significantly to a violation of a national ambient air quality standard in one or more other States, the Administrator may establish, by rule, a transport region for such pollutant that includes such States. The Administrator, on the Administrator's own motion or upon petition from the Governor of any State, or upon the recommen-

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MEMORANDUM

SUBJECT: Draft DOD Policy on Emission Reduction Credits

FROM: Eleanor Kaplan

TO: Deirdre Nurre

After we spoke yesterday I checked Esther's files to see if I could find a copy of a draft DOD Policy on Emission Reduction Credits. The closest thing I found was a memo from the Navy to the DOD, dated July 30, 1993 which attached a draft DOD policy for consideration and adoption. Apparently this was not adopted because there is a letter from Mary Nichols to Sherri Goodman dated June 30, 1994 requesting the opportunity to review the guidance being developed by the DOD on air emission credits. Esther's file does not contain a reply to this letter and I have put in a call to Cecilia Estolano, an Assistant to Mary Nichols, to find out what the response to the letter was. I will let you know what I hear from Cecilia or, if you need the information quickly, you can call her at (202) 260-9562.

In looking through the files, I found a letter, also attached, from the Air Force Regional Counsel indicating that there is an Air Force policy on ERC's that was signed on June 3, 1993. I did not find any indication that the other services have adopted a similar policy.

Attached are copies of the above documents. Hope this information is of help. Please call me if you need anything else. Best regards,

Eleanor

457

DEPARTMENT OF THE NAVY

OFFICE OF THE ASSISTANT SECRETARY
(INSTALLATIONS AND ENVIRONMENT)
WASHINGTON, D.C. 20360-5000

30 July 1993

MEMORANDUM FOR THE DEPUTY UNDER SECRETARY OF DEFENSE
(ENVIRONMENTAL SECURITY)

Subj: DRAFT DOD POLICY ON CLEAN AIR ACT EMISSION REDUCTION CREDITS

Encl: (1) Draft Department of Defense Acquisition and Disposal Policy for Clean Air Act Emission Reduction Credits, dated 28 July 1993
(2) Proposed legislation to address ERC funding issue

Section 172(c)(6) of the Clean Air Act authorizes States, or their local air quality districts (AQDs), to establish trading systems for emission reduction credits (ERCs). EPA published guidance for emissions trading as early as 1986 however, most areas of the country have only begun to establish programs to bank and trade ERCs, as restrictions on air emissions sources have increased. The issue became critical to DoD this past year primarily because of community interest in obtaining the ERCs at closing bases to support civilian reuse. In addition, as emissions limitations become more stringent, operating bases may need to acquire ERCs to continue or expand operations. Because this issue was of concern DoD-wide, I asked the Services Steering Committee for Clean Air Act Implementation to address the issue. The Steering Committee created a Subcommittee to draft a DoD policy; enclosed is the product of the Subcommittee's efforts. This draft policy has received the approval of the Services Steering Committee, has been formally concurred in by the Air Force and the Army, and we believe it is ready for formal coordination and adoption as DoD Policy.

The policy addresses the three key issues identified by the Subcommittee: (1) how to characterize ERCs within the government acquisition and disposal system, (2) identification of funding sources to create or acquire ERCs, and (3) a priority system for allocation of ERCs.

Characterization of ERCs was the most difficult issue, as they do not fit well within presently existing categories of property or licenses. The Subcommittee determined that the most reasonable and immediately workable solution was to classify ERCs as a form of personal property, and as such, the acquisition and disposal of ERCs could be handled within existing federal property acquisition and disposal procedures. In those instances where the removal and separate disposal of ERCs from the real property would significantly diminish the value of the real property, the ERCs can be categorized as "related" personal property and transferred with the real property.

The funding works smoothly in the base closure context because of the availability of the BRAC account. Funds to create and/or acquire ERCs should be available from the BRAC account, and proceeds from the sale of ERCs at closing bases should be deposited in the BRAC account. For operating bases, however, the existing disposal regulations do not support productive trading of ERCs outside the federal government. ERCs which are deemed surplus to the federal government must be disposed of through the General Services Administration, with the proceeds from the disposal transferred to the U.S. Treasury. This creates a disincentive to create ERCs at the installation level, as ERCs are expensive to generate and proceeds from the sale do not return to the installation that paid to create them. The Military Departments need a process which allows the proceeds of the sale of unneeded ERCs at one location, to be available to purchase ERCs at another location. To address this problem we have drafted proposed legislation (See enclosure (2)). However, this proposal has not yet been coordinated with the other Services.

Establishing a priority system for allocation of ERCs was a key concern in developing the draft policy. Both community reuse groups and military bases within the same air district may have need for the ERCs. Paragraph D(3)(b) of the policy establishes a procedure for balancing the needs of both groups. The policy acknowledges a bias towards community reuse. If the ERCs are deemed critical to the viability of community reuse, they can be determined to be related personal property and transferred with the real property, rather than screened separately as personal property. In the operating base context, they will be screened, as usual, as items of personal property.

I recommend that: 1) the draft policy be coordinated on a quick turn-around basis, and adopted as DoD Policy, and 2) that further work on the legislative proposal proceed. My staff point of contact is Mr. Ronald E. Tickle, CNO N457, at (202) 433-7009.

Elsie L. Munsell

ELSIE L. MUNSELL
Deputy Assistant Secretary of the Navy
(Environment and Safety)

Copy to:
ODASA (E,S&OH)
ODASAF (E,S&OH)
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CNO N45
CMC-LFL
DLA-W
AEO (ENVR-EP)
AF CEVC

REVISED DRAFT
28 July 1993

DEPARTMENT OF DEFENSE ACQUISITION AND DISPOSAL POLICY FOR CLEAN AIR ACT EMISSION REDUCTION CREDITS

Ref: (a) GSA Disposal Regulations, 41 CFR Subchapter H, Parts 41-47
(b) DoD Directive 5410.12 of 22 Dec 87, Economic Adjustment Assistance to Defense-Impacted Communities
(c) Federal Acquisition Regulation
(d) DoD Instruction 4170.10 of 8 Aug 91, Energy Management Policy
(e) DoD Directive 4160.21 of 5 Dec 80, DoD Personal Property Utilization and Disposal Program

A. PURPOSE

1. To provide DoD policy on the acquisition and disposal of emission reduction credits (ERCs) for operating installations and for installations subject to the Base Closure process.

B. APPLICABILITY AND SCOPE

1. This policy applies to DoD components in the United States or its Territories.

C. BACKGROUND

1. Section 172(c)(6) of the Clean Air Act authorizes States, or their local air quality districts (AQDs), to establish, by regulation, a trading system for emission reduction credits (ERCs). ERCs are created when equipment that emits pollutants is removed from service, or emissions from equipment remaining in service are reduced, where the emission reductions would not be otherwise required by the CAA or a current State Implementation Plan, and the owner applies under the AQD regulations for credit for the reduction. Each ERC constitutes permission from the AQD to emit a stated amount of a specific air pollutant. Following validation by the AQD, ERCs may be transferred by sale, lease or other disposal method, for use by other emission sources within the same air quality districts.

2. Emission reduction credits are a novel form of property. ERCs only exist when created in accordance with a system to

establish, bank, and trade the ERCs under a state or local implementation plan. In addition, the emission potential of the ERCs banked at any particular time can be adjusted by the State if necessary to meet attainment goals or other Clean Air Act requirements. Nevertheless, ERCs can be a valuable asset to DoD in this era of ever increasing regulation of air emissions.

3. The Base Closure and Realignment Act of 1988 (BRAC) and the Defense Base Closure and Realignment Act of 1990 (DBRAC), delegate to the Secretaries of the Military Departments the authority for utilization of excess real property and disposal of surplus real property and facilities resulting from the closure of military installations.

D. POLICY

1. ERCs will be treated as Federal personal property and acquired and disposed of in accordance with references (a), (b), (c), (d) and (e).

2. In disposing of ERCs where real property associated with emission sources is being reported as excess or transferred, and the removal and separate disposal of the ERC from the real property would significantly diminish the value of the real property, the ERC can be categorized as "related" personal property and transferred with the real property.

3. For bases that are being closed or realigned pursuant to the BRAC/DBRAC process or any subsequent base closure law, ERCs will be utilized and disposed of in the following manner.

a. Operational Needs Requirement ERCs. Military Departments may transfer ERCs, generated from ceasing operations at the closure base, to other same-Department installations within the same AQD or another AQD that will accept transfer credits, when the ERCs are needed to fulfill operational requirements at the receiving installation. Operational Needs Requirement ERCs include all ERCs needed for the Installation Restoration Program (IRP).

b. Related Personal Property ERCs. Prior to initiation of the federal property screening process, the Military Department should consider the potential needs of future recipients of the real property including DoD components, other federal agencies, and community reuse groups, and determine which ERCs will be available for transfer as related personal property after Operational Needs Requirement ERCs within that Military Department are addressed. In making the determination of related personal property the Military Department should also consider DoD component needs for the personal property as described in reference (b).

c. Personal Property ERCs. Military Departments will dispose of any ERCs that remain after Operational Needs and Related

Personal Property ERCs have been addressed as Personal Property ERCs using existing personal property disposal mechanisms.

d. Generally, the BRAC/DBRAC Account is the source of funds for the costs to inventory and apply for approval to bank ERCs at a closing installation. Any installation receiving Operational Needs Requirement ERCs may be asked to reimburse the BRAC/DBRAC Account for its proportionate share of the cost of inventory and application fees. All recipients of Related Personal Property ERCs will, at a minimum, reimburse the BRAC/DBRAC Account for their proportionate share of the costs of inventory and application fees. Reimbursement is not required if the receiving installation is a BRAC realignment site.

e. The BRAC/DBRAC Account is also a source of funds to purchase ERCs needed at any realignment receiving locations to allow implementation of recommendations of the BRAC Commission.

4. For Operating (NON-BRAC) Installations, ERCs will be utilized and disposed of in the following manner.

a. Emissions reduction credits generated from a change in operations, removal from service of equipment, etc., or any other action that results in emissions reduction may be ~~and~~ banked for:

1. future use by that same installation;

2. transfer to another same Department installation within the same AQD or another AQD that will accept transfer of the credits;

3. transfer to any DoD installation within the same AQD or another AQD that will accept transfer of the credits; or

4. transfer to any other federal agency within the same AQD or another AQD that will accept transfer of the credits.

b. ERCs may be transferred between Military Departments pursuant to 10 U.S.C. Section 2571, without compensation.

c. ERCs determined to be surplus to the federal government shall be reported for screening and disposal using the existing personal property disposal mechanisms.

E. RESPONSIBILITIES

1. The Deputy Under Secretary of Defense (Environmental Security) (DUSD)(ES) shall:

a. Provide policy and management oversight for DoD's air quality program.

b. Designate a lead Department to coordinate ERC trading between Military Departments.

2. Each Military Secretary shall develop a policy and guidelines to assure implementation of this policy. In addition, each Military Secretary shall:

a. For BRAC/DBRAC installations or any other DoD installations closed under subsequent base closure laws, determine which ERCs will be available for transfer as related personal property.

b. Establish a mechanism for identifying installations that need to acquire ERCs.

c. Report Personal Property ERCs for federal agency screening as appropriate.

d. Ensure that commanders and heads of installations document and apply for validation of ERCs when determined to be beneficial and appropriate under this policy and the Military Department's implementing policy.

Sec. XXX Acquisition and Disposal of Emission Reduction Credits

(a)(1) The Secretary of a military department or the head of a defense agency is authorized to acquire and dispose of air emission reduction credits and similar credits established under economic incentive programs, hereafter referred to as "ERCs," by a military department or defense agency. The Secretary or the head of the defense agency shall provide for the acquisition, creation, banking, transfer, exchange, leasing and disposal of ERCs in accordance with federal and state law.

(b) Except as provided in subsection (c), proceeds from the disposal, transfer or exchange of ERCs shall be credited to funds available for operations and maintenance of the military department or defense agency. Funds available for operations and maintenance may also be used for the acquisition, creation, banking, transfer, exchange, leasing and disposal and other related costs of ERCs.

(c) In the case of ERCs created or made excess as a result of closure or realignment of a base or installation in accordance with P.L. 100-526 or P.L. 101-510 (10 U.S.C. 2687 note), the appropriate base closure account shall be used for the acquisition, creation, banking, transfer, exchange, leasing, disposal and other related costs of ERCs and the deposit of proceeds from the disposal or transfer of ERCs.

AIR EMISSIONS REDUCTION CREDIT POLICY AT CLOSURE BASES

1. References.

a. Base Closure and Realignment Act of 1988 (BRAC).

b. Defense Base Closure and Realignment Act for 1990 (DBRAC).

c. Air Emission Reduction Credits Policy Memorandum, Deputy Assistant Secretary of the Air Force (Environment, Safety and Occupational Health) (SAF/MIQ), May 29, 1992.

d. Air Force Policy on Disposition of Personal Property, Deputy Assistant Secretary of the Air Force (Installations) (SAF/MII), June 26, 1992. letter

e. Emissions Trading Policy, 51 Federal Register 43830 (December 4, 1986). EPA

2. Background.

As directed by BRAC and DBRAC the Air Force is closing/realigning numerous air bases and missions. Also, according to these Acts, the Air Force is responsible for disposing of the surplus real property, which includes related personal property. Reference c states Air Force policy for air emission reduction credits, namely, they will be treated as Federal personal property and disposed of according to the appropriate Federal property disposal regulations in the Record of Decision (ROD) for the disposal/reuse of the base.

3. Categorization of Emission Reduction Credits (ERCs) as Federal Property. not considered property in state law (40 CFR 1072)

a. Operational Needs Requirement ERC. Emission Reduction Credits in an Air Quality District (AQD) where the base is closing which the Air Force would need to buy to fulfill its operations at another Air Force installation in the same AQD or in any other AQD that would accept transfer of the credits. Operational Needs Requirement ERCs include all ERCs needed for the Installation Restoration Program (IRP).

b. Related Personal Property ERC. Available Emission Reduction Credits the removal of which would significantly diminish the value of the property if not transferred with the real property. The Air Force will consider development plans of the reuse groups and determine which ERCs will be available for transfer as related personal property after Air Force "Operational Needs Requirement" ERCs are addressed.

c. Personal Property ERC. Emission Reduction Credits in an AQD which are left after "Operational Needs Requirement" ERCs and "Related Personal Property" ERCs have been transferred. These credits will be subject to final disposition using the existing personal property disposal mechanisms including screening with other DoD and federal agencies to fulfill existing requirements.

4. ERC Identification.

a. One year prior to the departure of the active mission from a currently announced closure base (immediately at bases where the active mission has departed) or within 6 months of a base closure announcement for future closures, the installation commander will 1) complete an inventory of all existing/potential sources of ERCs and 2) have a legal review prepared summarizing applicable AQD regulations on ERCs, including discounts on transfer or plant shutdown, time to file applications, etc. The commander will forward the inventory and legal review of these ERCs to their MAJCOM/CEV (Environmental Division). The ERCs will be preliminarily classified as Related Personal Property ERCs, Operational Needs Requirement ERCs, or Personal Property ERCs on the inventory in accordance with the definitions in paragraph 3 above. The MAJCOM/CEVs will review/validate the ERCs/categories and forward the inventory and legal review to the Air Force Civil Engineer, Environmental Quality Directorate (AF/CEV). AF/CEV will circulate the inventory to other MAJCOM/CEVs with installations in the same AQD who will identify ERCs they might need. AF/CEV will then revalidate the list and forward it with the legal review to the Air Force Base Disposal Agency (AFBDA). AFBDA will review/validate the ERCs/categories and submit to SAF/MIQ and SAF/MII for final approval.

b. Where AFBDA is responsible for the base, the Operation Location (OL) Site Manager will conduct the inventory per paragraph 4a above and forward the list to AFBDA. AFBDA will coordinate with AF/CEV and the other MAJCOM/CEVs with installations in the same AQD to review/validate the ERCs prior to submission to SAF/MIQ and SAF/MII for approval.

5. ERC Application.

a. Once potential ERCs are approved by SAF/MIQ and SAF/MII the base or OL, as applicable, will apply to the AQD for the ERCs. BRAC/DBRAC Account is the source of funds for the inventory and application. If the inventory is prepared before the OL assumes responsibility, the MAJCOM will request the funds from AFBDA.

b. Any MAJCOM receiving Operational Needs Requirement ERCs from the closure base will reimburse the BRAC/DBRAC Account for its proportionate share of the costs of the inventory and application fees. Reimbursement is not required if the receiving installation is a BRAC realignment site.

c. All reuse groups receiving Related Personal Property ERCs will, at a minimum, reimburse the BRAC/DBRAC Account for the proportionate share of the costs of the inventory and application fee.

6. ERC Disposition.

Once the AQD issues the ERCs, they will be disposed of in accordance with SAF/MIQ and SAF/MII approval as per paragraph 4 above and as described below.

a. Operational Needs Requirement ERCs will be transferred to the Air Force organization which would need to buy the credits.

b. Related Personal Property ERCs will be disposed of in the same manner as the real property to which they are "related".

c. AFBDA will screen ERCs identified as excess personal property with other Department of Defense agencies and other Federal agencies. Thereafter, any remaining ERCs will be transferred as surplus property to GSA for disposal under their regulations.

d. Any disputes over whether certain ERCs are Operational Needs Requirement ERCs will be resolved by SAF/MIQ and SAF/MII.

7. Effective Date/Implementation Guidance.

This policy is effective upon signing. AF/CEV is the office of primary responsibility (OPR) for issuing implementing guidance on ERC identification and application procedures. AFBDA is the OPR for issuing guidance on the disposition of the ERCs.

5/27/93
DATE

GARY D. VEST
Deputy Assistant Secretary of the Air Force
(Environment, Safety and Occupational Health)

6/3/93
DATE

JAMES F. BOATRIGHT
Deputy Assistant Secretary of the Air Force
(Installations)

DRAFT

DECISION PROCESS

FOR

AIR PERMIT DISPOSAL AT CLOSURE INSTALLATIONS

Does the air quality management district (AQMD) in which the installation is located have or have plans to implement an Emission Reduction Credit program before the scheduled installation closure date?

1. If no, contact regulator and inquire into alternate methods for preserving permit for future use or future ERC programs, e.g. transfer of emissions unit under existing permit conditions, negotiation of a future credit agreement, if possible.

2. If yes, obtain regulations or proposed regulations and determine the following:

   a. Are any of the pollutants included in the ERC program or proposed program the same as those produced by the installation?[1]

      If no, stop
      If yes, proceed

   b. Are emission sources on the installation eligible for the ERC program or proposed program?

      If no, further analysis is not necessary
      If yes, proceed

   c. Identify the process for calculating ERC value for each type of eligible emission source and answer the questions pertaining to each step of the process:

      (1) Identify the qualifying event, e.g. source shutdown, implementation of control measures in excess of requirements, etc. Will any of these events occur during installation closure?

         If no, further analysis is not necessary
         If yes, proceed

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[1] This can be determined by reviewing the installation emissions inventory which identifies emissions and estimates their quantity. ERC programs will typically include all criteria pollutants for which the air basin is non-attainment and some pollutants of local concern.

DRAFT

(2) Determine the period during which application must be made after qualifying event, e.g. 90 days. Are you still within that period following the qualifying event?

If no, further analysis is not necessary.
If yes, proceed.

(3) Identify the calculation methodology, e.g. modeling based on US EPA Compilation of Air Pollutant Emissions Factors (AP-42), CFRs, or actual emission measurements. Can the prescribed methodology or a negotiated alternate be used?

If no, further analysis is not necessary
If yes, proceed

(4) Identify requirements for verifying data, e.g. historic records on fuel consumption, average use, etc., and the period for which such records are required. Are these materials available or can satisfactory alternates be obtained?

If no, further analysis is not necessary
If yes, proceed

(5) Identify administrative discounting of emissions to account for current BACT, RACT, etc., or other reductions in value included in the calculation process. After discounting is assessed, will there be any residual value?

If no, further analysis is not necessary
If yes, proceed

d. Conduct preliminary cost/benefit analysis based on the following factors:

(1) Costs of acquiring ERCs (in-house and contracted):

(a) <u>Expenses</u>:

- Research to identify emission modeling formulas and emission factors;
- Creation of spreadsheets with algorithms needed to complete calculations
- Preparation of inventory of all ERC eligible emission sources

DRAFT

- Collection of specific information needed to complete calculations for each emission source, e.g. BHP, BTU rating, fuel type, fuel consumption rates, etc., per calculation methodology.

- Preparation of ERC application; and

- Payment of ERC application fee.

(b) Other Costs:

- Adverse impact on redevelopment?

  -- Assuming shut down is the qualifying event, does redevelopment need continuing access to the product of the emissions unit, e.g. steam heat?

- Lost opportunity, e.g. loss of ability to transfer an existing emission source and right to operate source without having New Source Review.[2]

(2) Benefits of acquiring ERCs:

(a) Revenue:

- Through open market sale of ERCs

(b) Reuse of ERCs for other programs in AQMD:

- Air Force
- DoD
- Federal Agencies
- Public Benefit Transfers

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2 While the permit itself cannot be transferred, the equipment can. Under SCAQMD Rule 1313, if the new owner applies for a new permit simply to reflect the change of ownership, his operation of that equipment will not be subject to New Source Review. In short, he can, after paying a nominal application fee, continue to operate the equipment under the same permit conditions as the last owner. If the same equipment were being permitted for the first time, it would subject the owner to NSR. This process would require application of the latest control technology and submission of emission offsets. Because operating conditions are "grandfathered" in a transfer, this equipment has an artificially enhanced value. If it were removed from the District, this "value" would no longer exist. The difference is the "lost opportunity."

(c) Institutionalization of ERC Program AF wide[3]

d. If benefits outweigh costs by a sufficient margin to justify the effort, establish process to obtain ERCs at installation:

(1) Prepare an inventory of all eligible emission sources which includes all the data required to conduct emission calculations.

(2) Prepare files on each piece of equipment and include in that file:

(a) Copy of Permit and all related correspondence;

(b) Results of Equipment Survey with all data required to complete the emissions calculations;

(c) Copies of all historic data required for ERC application--if none exists, create the requirement and ensure records are kept;

(d) Projected shutdown/removal date; and

(e) Draft ERC application.

(3) Set up spreadsheet (e.g. Lotus) with algorithms necessary to complete calculations.

(4) Complete ERC applications within established time limits after qualifying event and compile required substantiating data.

(5) Ensure application fees are funded and submit application.

e. If the cost/benefit analysis indicates it would not be appropriate to apply for ERCs, do not establish program, but determine if other processes which preserve the permit for future use or future ERC programs are feasible.

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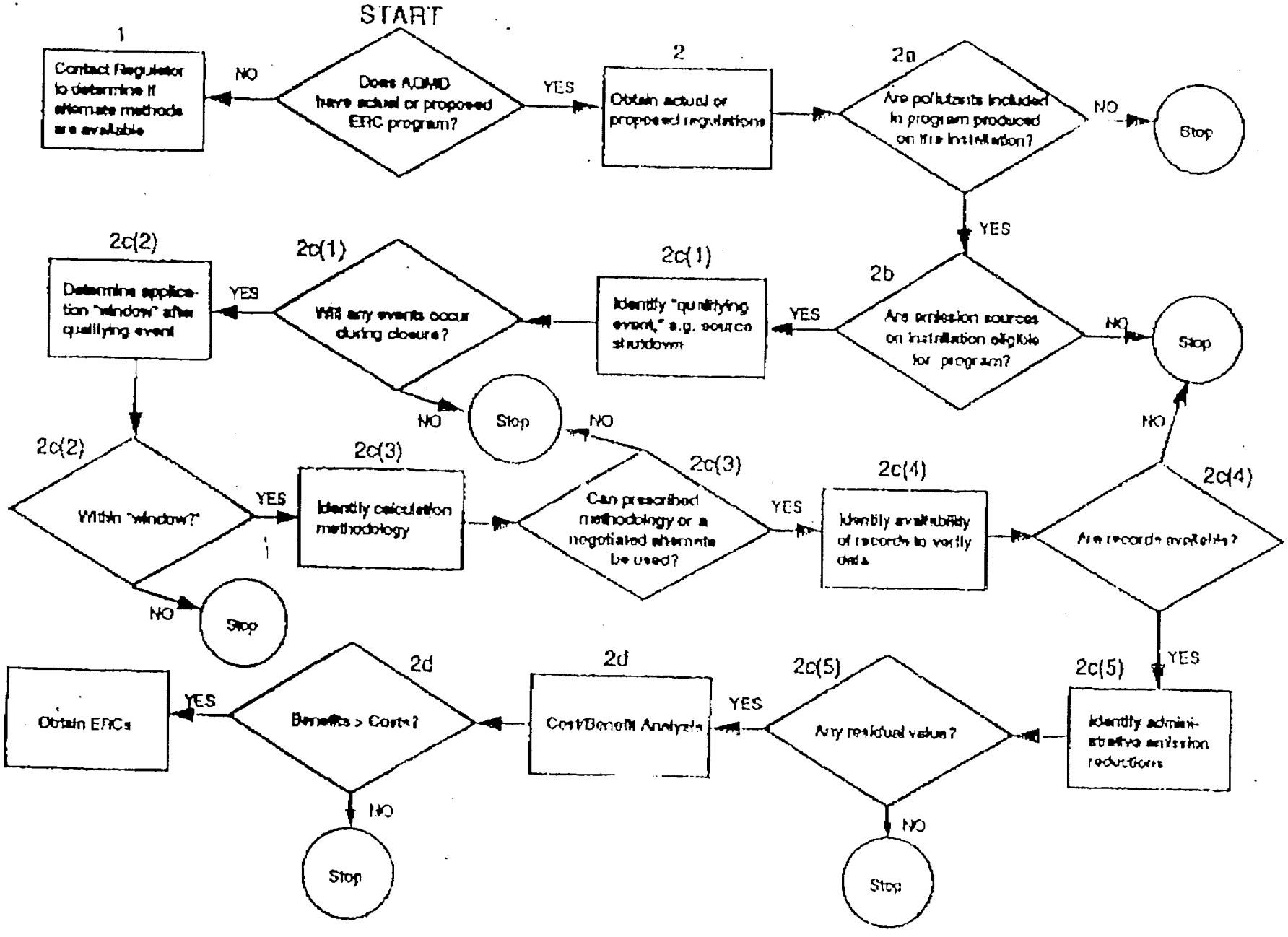
[3] Each installation, regardless of closure status, ought to have an air program that incorporates the following items: (1) an accurate inventory of all emission sources which includes information on the status of necessary permits and the data necessary to model emissions; (2) a process for maintaining the accuracy of the inventory; (3) an automated (spreadsheet) process for modeling emissions. This would allow permit status to be accurately tracked, provide a better estimate of actual emissions than the present method used to produce the installations emissions inventory, and ease the ERC process when a qualifying event occurs. This process was conducted in-house at Norton AFB.

ERC DECISION PROCESS



94/220

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 30 1994

OFFICE OF
AIR AND RADIATION

Ms. Sherri W. Goodman
Deputy Undersecretary of Defense
Environmental Security
3400 Defense Pentagon
Washington, DC 20301-3400

Dear Ms. Goodman:

I am writing to request the opportunity to review and comment on the guidance being developed by the Department of Defense on air emission credits and offsets. It is my understanding that the Emissions Credit Subcommittee of the Joint Services Steering Committee will soon forward to you draft guidance on the disposal of air credits and offsets. I would appreciate the opportunity to review this draft and offer the Environmental Protection Agency's perspective on air policy.

Our involvement in air policy issues associated with the closure and realignment of military bases has recently increased. On a local level, staff at EPA have begun working with the military to assist in air conformity determinations at Travis Air Force Base, Lemoore Naval Air Station, and Miramar Naval Air Station in California. At his request, I recently met with California Assemblyman Cannella to discuss air policy issues associated with the closing of Castle Air Force Base and the expansion of Lemoore Naval Air Station. Our regional staff are also working with the California Base Closure Environmental Committee to identify steps that closing bases may follow in quantifying air emissions, applying for emission reduction credits, and determining air credit or offset needs for conformity determinations, permits, and reuse.

Given this activity, I believe both DOD and EPA would benefit from our coordination on air policy. I look forward to your response to this request. If you have any questions, please call me at 260-7400.

Sincerely,

Mary Nichols
Assistant Administrator

Spoke to Col Sam Rupe

Air Force Regional Counsel
AFLSA/JACE-WR
630 Sansome Street, Suite 1334
San Francisco, CA 94111-2278
Voice: (415)705-1686
Fax: (415)705-1682

May 5, 1994

Mike,

Attached are several policy and policy-related DOD and AF correspondence regarding the emission reduction credit (ERC) issue at closure bases. Currently, there is no DOD policy on how to deal with ERCs derived at closure bases. The Air Force policy on ERCs at closure bases was signed by the Deputy Asst Sec'y of the Air Force for Installations (SAF/MII), Mr. Boatright, on June 3, 1993. I don't know if the Navy has a similar military service-specific policy. Please note that the Air Force policy was issued prior to the Pryor Amendments and President Clinton's 5-part plan on community economic rejuvenation. There is no final DOD policy -- only a draft.

I have also attached a copy of the Air Force's position on Rep. Condit's House Resolution 4182.

I believe the key issue (in DOD's view) will not so much be ERCs but will involve allocation of the "mobile source planning offsets" (MSPOs, another DOD-coined anacronym) derived from closure bases that DOD needs for conformity determinations for major unit realignment actions. The competitive needs for ERCs between the reuse groups and DOD organizations will rarely surface (even though it has for Mather AFB and Castle AFB).

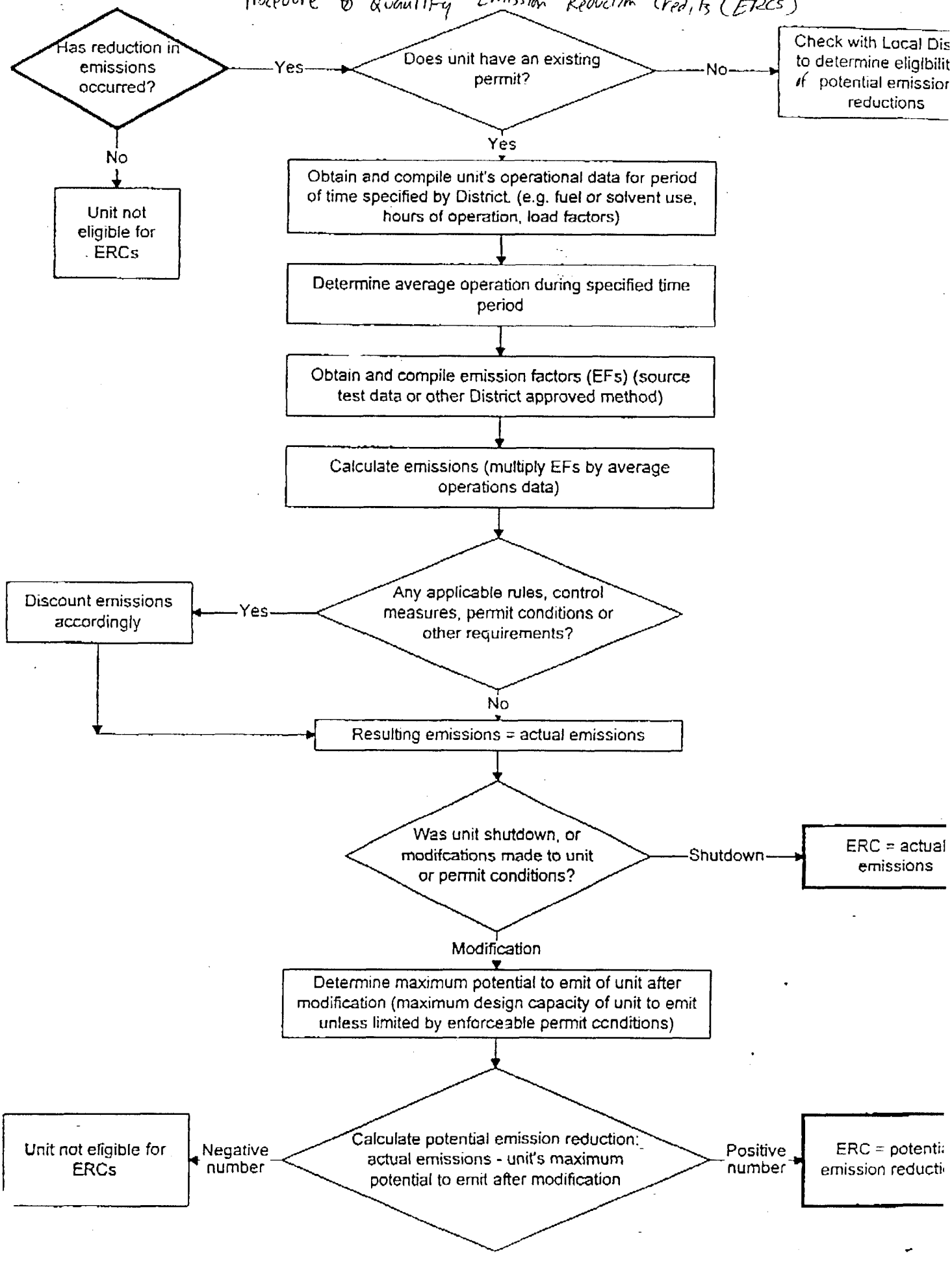
Please call me if you have any further questions or want to discuss the ERC or MSPO issues further.

Dan

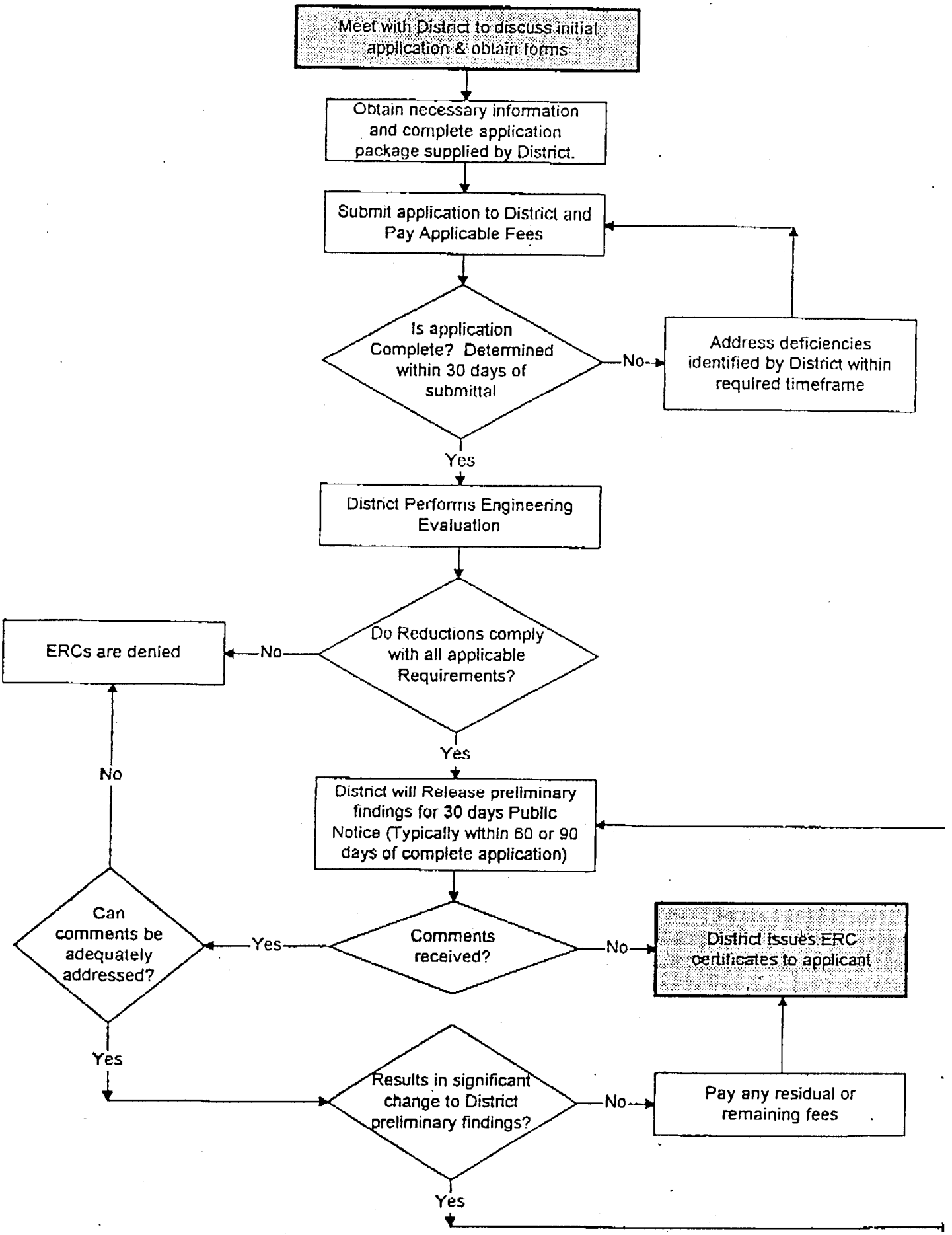
8 Atchs
1. Memo for DOD General Counsel, 4/29/94
2. Navy Request for Castle AFB Credits, 4/8/94
3. Point Paper (circa early 1992)
4. Staff Summary Sheet w/atchs, 1/6/92
5. Draft DOD Policy Ltr on ERCs, 7/30/93
6. Air Force Air ERC Policy at Closure Bases, effective 6/3/93
7. Draft Decision Process for Air Permit Disposal (undated)
8. SAF/MIQ Letter to Honorable F. Gonzales, 8/19/92

Document Separator

Procedure to Quantify Emission Reduction Credits (ERCs)



Procedure to Obtain Emission Reduction Credits



Military Base Closures:
PROPOSED LEGISLATION (AB 3204 CANELLA)

☞ *A significant number of military bases have been or will be closed before 1999 in California which will result in the loss of thousands of jobs. In response, several steps are underway to provide for the expeditious reuse of military bases which are scheduled for closure. Because emission offsets will be required for many of the reuse activities at closing bases, proposed legislation was drafted (AB 3204 Cannella) to assure emission reduction credits generated from reduced base operations are quantified and preserved. The purpose of this briefing paper is to provide the following: 1) background related to military base closures and reuse; 2) summary of proposed State legislation (AB 3204 Cannella); and 3) summary of proposed federal legislation.*

BACKGROUND:

- Emission reduction credit banking is a program used by local air pollution control districts or air quality management districts (districts) to preserve emission reduction credits (ERCs) for later use as emission offsets;
- Reuse of closed military bases may require a significant amount of emission offsets;
- Many closing bases lack incentives to apply for ERCs;
- District rules/regulations require timeliness of application filing following equipment shutdown before emission reductions may be eligible for banking. In some cases, emission reductions that have already occurred at a closed base may not be eligible to be banked;
- District banking application filing fees may be significant and a closing base may lack the funding needed to pay these fees;
- Many closing bases lack the resources needed to quantify available emission reductions;
- The Department of Defense (DoD) currently does not have a policy regarding the establishment and use of ERCs. The military considers ERCs to be property and cannot dispose of such property until a disposal policy is developed by the DoD;
- Reuse entities planning for reuse activities at closing bases have no way of knowing the quantity and type of ERCs that may be made available. Therefore, since the availability of ERCs is a prerequisite to many reuse activities, many reuse proposals may not be possible; and
- Recommendations from the Governor's Military Base Reuse Task Force have been incorporated into proposed legislation.

SUMMARY OF AB 3204 CANNELLA:

- Proposed legislation is intended to ensure ERCs generated at closing bases are quantified and preserved;
- Proposed legislation is the result of combining AB 3178 McPherson and AB 3204 Cannella;
- Proposed legislation provides the following:

1. *Federal Government may apply for emission reduction credits within 180 days of the reduction in emissions or June 1, 1995, whichever is later.*
   - *This applies only if federal government is eligible to apply under existing district regulations on December 31, 1994.*

2. *Within six months days after closure decision becomes final or July 1, 1995, whichever is later, the District shall request and attempt to attain all records, provided:*
   - *District waives all costs for obtaining records, or*
   - *District enters into agreement with federal government or base reuse authority for payment of costs.*

3. *District shall quantify emission reduction credits within 180 days of request and payment of fees by base reuse authority.*

4. *Base reuse authority is eligible to apply and receive credits provided one of the following is satisfied:*
   - *Federal government agrees in writing;*
   - *Time limits for federal government to apply have expired;*
   - *Other legal means are used to acquire credits.*

5. *Five percent of emission reduction credits generated to go towards attainment;*

6. *The baseline for quantifying shall be the date base closure or realignment decision becomes final (2 out of five years);*

7. *Emission reduction credits obtained by base reuse authority to be used for base reuse within jurisdiction of district; and*

8. *Base reuse plans must be considered in development of districts' attainment plans.*

SUMMARY OF PROPOSED FEDERAL LEGISLATION:

- In addition to the State proposal (AB 3204 Cannella), the Administration has proposed federal legislation to require the military to provide relevant records to the local air districts, to apply for credits or pay an in-lieu fee for air emission credits not applied for (to be reimbursed when the credits are used), to establish air credits as "related personal property" available for base reuse, and to require the base to meet and confer with local officials prior to transferring air emission credits to other bases.
- It is not likely that action on this proposal will occur this year.

Document Separator

BOARD OF SUPERVISORS

COUNTY OF SUTTER

1160 CIVIC CENTER BLVD.
YUBA CITY, CALIFORNIA 95993

(916) 741-7106

December 15, 1994

Mr. David S. Lyles, Staff Director
Defense Base Closure and Realignment Commission
1700 N. Moore Street, Suite 1425
Arlington, VA 22209

Dear Mr. Lyles:

I am the Chairman of the Feather River Air Quality Management District which includes Yuba and Sutter Counties, also the Chairman of the Sutter County Board of Supervisors and one of many local supporters of the effort to save Beale Air Force Base.

I would like to address the concerns that have recently been expressed regarding the impact that expansion of Beale Air Force Base would have on our local air quality.

I have enclosed a letter from Kenneth L. Corbin, the local air pollution officer, prepared at my request, that describes in detail local air quality conditions and how they might affect the expansion of Beale Air Force Base.

If you have any further questions please do not hesitate to contact me.

Very truly yours,

Joe Benatar
Chairman

JB/smj
Attachment

FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT

Serving the Counties of Yuba and Sutter
463 Palora Avenue, Yuba City, CA 95991-4711
916/634-7659 FAX 916/634-7660 Burn Information 916/741-6299

Kenneth L. Corbin
Air Pollution Control Officer

December 15, 1994

Mr. Joseph Benatar
Chairman, Sutter County Board of Supervisors
1160 Civic Center Boulevard
Yuba City, California 95993

Dear Mr. Benatar;

This letter is with reference to local air quality as it may concern the mission at Beale Air Force Base and the impact, if any, that expansion of Beale Air Force Base may have on local air quality.

The California Air Resources Board has several air monitoring stations located in the Sacramento Valley which measure wind speed, wind direction, and ozone concentration. The monitoring station in Yuba City is located approximately 10 miles west of Beale Air Force Base. That monitoring station is the closest monitoring station to Beale Air Force Base. The California Air Resources Board supplies air quality information from all of its stations to the United States Environmental Protection Agency (EPA) San Francisco office. This information is used in determining the attainment status for each air quality district.

In California there are two ambient air quality standards. The federal standard is twelve (12) parts of ozone per one hundred (100) million and is attained when it is not exceeded more than one day per year, averaged over a three year period. The California standard is nine (9) parts of ozone per one hundred (100) million and it may not be exceeded.

Typical ozone measurements at the Yuba City station show that the highest concentrations are four (4) to five (5) parts ozone per one hundred (100) million in the winter months (November through May) and as high as ten (10) to eleven (11) parts ozone per hundred million in the summer months (June through October).

The California standard of nine (9) parts per one hundred (100) million was exceeded an average of fourteen (14) days per year for calendar years 1991 thorough 1993. Therefore, the local area is designated as a moderate nonattainment area by the state. The federal standard of twelve (12) parts per hundred million has not been exceeded in the last five years. Therefore, the area including Beale Air Force Base is designated as a transitional non-attainment area by the EPA and could be redesignated to an attainment area by the EPA upon application and submittal of supporting data.

A substantial part of the air pollutants measured locally are a result of prevailing southerly winds which carry air pollution from the Sacramento metropolitan area. As the Sacramento area continues implementation of measures contained in the State Implementation Plan (SIP) and/or the Federal Implementation Plan (FIP) for the Sacramento area, our local air quality should show substantial improvement.

The Feather River Air Quality Management District and Beale Air Force Base staffs have worked together cooperatively to resolve any air quality issues and to insure that air quality requirements are met. Because of the continued improvement we have experienced locally, I believe that expansion of Beale air Force Base can be accomplished without a significant impact on our air quality.

Very truly yours,

Kenneth L. Corbin
Air Pollution Control Officer
Feather River Air Quality Management District

KC/lac

c: Jay Palmquist, Chairman
Yuba County Board of Supervisors

Deirdre

Background on Air Issues Affecting BRAC

All nonattainment areas are faced with the challenge of reducing air pollution emissions to meet safe air standards established through the Clean Air Act. In California, most of the local air agencies in nonattainment areas have already adopted controls on major stationary sources, thus completing the first and relatively easier steps of air pollution control. Air districts must now meet new requirements set by the 1990 amendments to the Clean Air Act, as well as the requirements of the California Clean Air Act. Following are explanations of some concepts and terms in air pollution control that are important to base closures and a brief discussion of issues that arise from air pollution control requirements.

Emissions Trading, Offsets, and Air Emission Reduction Credits (ERCs)

In order to create greater flexibility in meeting environmental requirements, EPA developed a policy to allow air pollution sources to trade emissions (Emissions Trading Policy Statement, 51 FR 43814). Emissions trading involves the creation of surplus emission reductions through application of advanced control technology, shutdown or curtailment of activities and the use of these emission reductions to meet pollution control requirements at other sources.

In nonattainment areas, major new stationary sources and major modifications are subject to a preconstruction permit requirement that they secure sufficient surplus emission reductions to more than "offset" their emissions. This requirement is designed to allow industrial growth in nonattainment areas without interfering with attainment and maintenance of the air quality standards. In attainment areas, new sources or modifications that might significantly change air quality or contribute to a violation of the national ambient air quality standards may need emission offsets.

Local districts can establish banking programs as part of their State Implementation Plans to store qualified emission reduction credits (ERCs) for later use in offset trades. These reductions must be real, permanent, quantifiable, surplus, and enforceable in order to be banked. Air districts can credit only those reductions that go beyond reductions already required in a rule or regulation. Banking programs usually require that the source apply for the emission reduction credit within a certain time from the date of curtailment or shutdown.

Each air district has a schedule of fees. Fees are generally based on the staff time spent processing the application and producing a report. Fees for ERC applications can be hundreds or thousands of dollars for each air permit held by a facility. Many military bases hold more than one hundred permits. The total cost for a closing base to apply for all of it's possible ERCs may be quite substantial. Because each district has established their own fee schedules and fees can vary greatly from district to district, it is important to consult with the local district for specific information.

Mobile source credits may be used as stationary source offsets or to delay compliance of emission reduction requirements.

Mobile source emission reduction credits are not necessarily valid in perpetuity because the life of the unit generating the reduction is finite. The life span of mobile source emission reduction credits varies depending upon the type of emission reductions used to generate the credit. For example, credits generated from the purchase of low-emission buses can last up to 12 years, credits generated from the purchase of Zero Emission Vehicles can last up to 10 years, and the life of the credits from the accelerated retirement older vehicles can last 3 years. Credits based on vehicle retrofits will have different lifetimes depending on the specifics of the particular case. South Coast AQMD, Sacramento AQMD and San Joaquin Unified APCD have adopted mobile source emission reduction credit rules. Bay Area AQMD and San Diego County APCD are developing mobile credit rules. Consult with local districts concerning availability of programs and rule requirements.

Conformity

Section 176(c) of the Clean Air Act prohibits a federal agency from supporting an action in any area unless the responsible federal agency determines that the action conforms to the applicable air quality implementation plan for the area. Examples of actions supported by the federal government might include review and approval of dredging permits, federal construction projects, airport expansion activities, and private actions taking place on public lands. The purpose of conformity is to ensure that federal actions: will not cause or contribute to new violations of any federal ambient air quality standards; will not increase the frequency or severity of any existing violations of federal ambient air quality standards; and will not delay the timely attainment of federal ambient air quality standards. Under EPA's general conformity regulation promulgated on 11/30/93, a conformity determination is required when the total of direct and indirect emissions in a nonattainment or maintenance area caused by a federal action exceed specified de minimis thresholds (based on the CAA's major stationary source levels) for the criteria pollutants.

The general conformity rule exempts certain federal actions from these conformity requirements. For example, transfers of real property which are conditioned in leases or contracts on the property being cleaned up under Superfund and where the federal agency does not retain control over emissions associated with the property under lease are exempt. However, realignment of bases is not a separate exemption, and actions associated with increasing a base's activities may require conformity determinations. In addition, federal agencies that provide approvals or funding for reuse-related activities (such as FAA approval or funding of a civil airport) may also have to make conformity determinations.

A conformity determination is made by meeting one of the following criteria: the total of indirect and direct emissions of the action are specifically identified in the emissions forecast in the applicable SIP's attainment or maintenance demonstration; complete emission offsets

Air Issues Impacting Closing Bases

Competing demands for credits or planning offsets: At each closing base, there are several possible parties interested in obtaining air credits or planning offsets. Air Quality Management Districts or Air Pollution Control Districts are the local or regional agencies responsible for regulating air pollution. Air districts may need air credits or planning offsets for their community banks to use in "funding" small businesses or public agencies. Air districts in nonattainment areas may also plan on using the credits or offsets to show progress toward meeting their requirement to attain the air quality standards.

Reuse groups are interested in obtaining air credits or planning offsets as a means of attracting business and revitalizing economic activity at closing bases. Planning offsets may also be needed for conformity determinations when the reuse activities require some form of federal approval or oversight, such as FAA approval of new airports.

Closing bases may need ERCs to cover the clean-up work at Installation Restoration Program (IRP) sites. An operating unit that is transferring from a closing base to another base may need ERCs to realign to the new location.

Military installations that are remaining open or expanding in the same air basin may need credits or planning offsets for conformity determinations or for new source permits. In the FIP areas (South Coast, Ventura, and Sacramento), military installations may need the credits or planning offsets to meet the declining cap on air emissions.

Once a base is slated for closure, all of the above parties must begin analyzing and communicating their need for ERCs and planning offsets within a fairly narrow window of time. For example, the reuse group must develop a good planning estimate as early as possible so the military can factor this need with those of the IRP sites, realigning bases in the air basin, and in FIP areas, bases with a declining cap on emissions.

Monetary Constraints: If air credits or planning offsets are not available for installations remaining open, the military may need to purchase ERCs in the open market. These credits may not be readily available and may be extremely expensive. Application fees are also part of the transaction cost. The money to apply for and purchase credits will probably come from BRAC funds, which are also the source for clean-up. In many air districts, closing bases may be asked by the reuse groups to maintain operating permits for operations that existed on the base, such as permits for generators, boilers, or paint booths, in order to transfer these permits to new owners and operators. The money to pay for maintaining these permits would probably come from the operations and maintenance budgets for the bases, which may be declining. The process of applying for air credits can be costly in terms of the resources needed to quantify emissions and the application fees. In the face of cleanup costs, commanders of closing bases may not believe money should be spent for maintaining

Air Emissions Checklist for Closing Bases

1) Initial general discussion with the local Air District about emissions inventories on the base. Discuss the following:

   - Consistent source identification
   - Requirements or methods for compiling inventory
   - Rules for use of credits
   - How to fill out application form for ERCs
   - Mechanisms for permit transfers to new owners and operators

2) Brief the Air District on the overall picture at the base; discuss base needs and status

3) Meet with the reuse group to discuss their needs and military needs for air credits and planning offsets. Develop draft list. Discuss planned quantification of emissions on base, current DoD policy on air credits, and current legislation.

   The reuse group should begin quantification of their needs for credits and planning offsets, using the same methods as the base. The reuse group should also identify sources that need direct permit transfer.

4) Quantify all emissions, both stationary and mobile, at the base through a source survey. This survey should include preparation of a detailed list of existing air permits showing location, emission factors, and availability for transfer. In quantifying emissions, consideration should be given to whether the base can apply for ERCs for these emissions or whether they will be needed as planning offsets for conformity determinations.

5) Meetings with the Air District, reuse group, and other military bases in the air basin following quantification of emissions. Discuss:

   - Quantification results
   - Needs for permits, credits, and/or planning offsets
   - Air District mechanisms for transfer of permits, application for credits

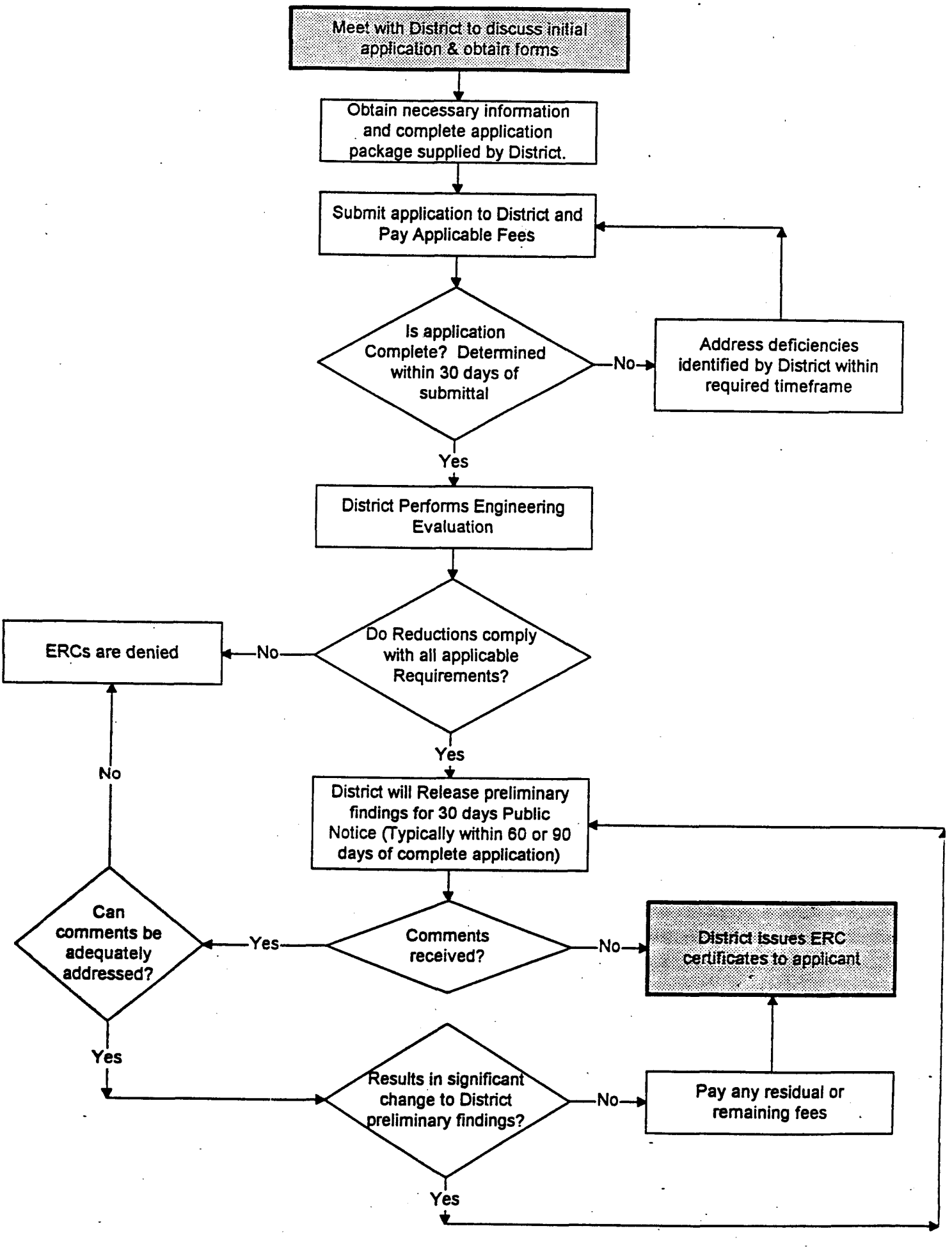
6) Develop draft allocation scheme in consultation with reuse group, air district, and other military bases in the air basin.

7) Receive and review comments from the reuse group, air district, and other military bases.

8) Finalize allocation scheme and implement:

   - Apply for ERCs
   - Arrange permit transfers
   - Document planning offsets for conformity determinations

Procedure to Obtain Emission Reduction Credits



SUMMARY OF AB 3204 CANNELLA:

- Proposed legislation is intended to ensure ERCs generated at closing bases are quantified and preserved;
- Proposed legislation is the result of combining AB 3178 McPherson and AB 3204 Cannella;
- Proposed legislation provides the following:

1. ***Federal Government may apply for emission reduction credits within 180 days of the reduction in emissions or June 1, 1995, whichever is later.***
   - ***This applies only if federal government is eligible to apply under existing district regulations on December 31, 1994.***

2. ***Within six months days after closure decision becomes final or July 1, 1995, whichever is later, the District shall request and attempt to attain all records, provided:***
   - ***District waives all costs for obtaining records, or***
   - ***District enters into agreement with federal government or base reuse authority for payment of costs.***

3. ***District shall quantify emission reduction credits within 180 days of request and payment of fees by base reuse authority.***

4. ***Base reuse authority is eligible to apply and receive credits provided one of the following is satisfied:***
   - ***Federal government agrees in writing;***
   - ***Time limits for federal government to apply have expired;***
   - ***Other legal means are used to acquire credits.***

5. ***Five percent of emission reduction credits generated to go towards attainment;***

6. ***The baseline for quantifying shall be the date base closure or realignment decision becomes final (2 out of five years);***

7. ***Emission reduction credits obtained by base reuse authority to be used for base reuse within jurisdiction of district; and***

8. ***Base reuse plans must be considered in development of districts' attainment plans.***

SUMMARY OF PROPOSED FEDERAL LEGISLATION:

- In addition to the State proposal (AB 3204 Cannella), the Administration has proposed federal legislation to require the military to provide relevant records to the local air districts, to apply for credits or pay an in-lieu fee for air emission credits not applied for (to be reimbursed when the credits are used), to establish air credits as "related personal property" available for base reuse, and to require the base to meet and confer with local officials prior to transferring air emission credits to other bases.
- It is not likely that action on this proposal will occur this year.

Document Separator

INDUSTRIAL/TECHNICAL SUPPORT

II.4 AIR QUALITY

Base Name	II.4.A Attainment Status	II.4.B Restrictions	II.4.C Future Growth	II.4 Air Quality
Hill AFB	Yellow	Yellow	Yellow	Yellow
Kelly AFB	Green	Yellow	Green	Green -
McClellan AFB	Red	Yellow	Yellow	Yellow
Robins AFB	Green	Green	Green	Green
Tinker AFB	Green	Green	Green	Green

How were the criteria assigned?
What were they weighted?
What were each of the above categories defined?
How specifically, [redacted]

UNCLASSIFIED

INDUSTRIAL/TECHNICAL SUPPORT - DEPOT Subcategory

VIII ENVIRONMENTAL IMPACT

Base Name	VIII.1 Water	VIII.2 Asbestos	VIII.3 Biological	VIII.4 Cultural	VIII.5 Installation Restoration Program	VIII Overall
Hill AFB	Green	Red	Green -	Yellow	Red	Yellow +
Kelly AFB	Red	Red	Yellow -	Red	Red	Red +
McClellan AFB	Green	Red	Yellow	Yellow	Red	Yellow +
Robins AFB	Green	Red	Yellow	Yellow	Red	Yellow +
Tinker AFB	Green	Yellow	Yellow	Yellow	Yellow	Yellow +

What does water mean — quality? supply? cost?
Asbestos condition? asbestos? friable? how?
Level? knowledge about it?

Biological: Species? cost?
Cultural: how defined? what about it mean?
IRP: How status?

INDUSTRIAL/TECHNICAL SUPPORT - DEPOT Subcategory

VIII.3 BIOLOGICAL

Base Name	VIII.3.A Habitat	VIII.3.B Threatened and Endangered Species	VIII.3.C Wetlands	VIII.3.D Floodplains	VIII.3 Biological
Hill AFB	Green	Green	Yellow	Green	**Green -**
Kelly AFB	Green	Green	Red	Red	**Yellow -**
McClellan AFB	Yellow	Yellow	Yellow	Yellow	**Yellow**
Robins AFB	Yellow	Yellow	Yellow	Yellow	**Yellow**
Tinker AFB	Yellow	Yellow	Yellow	Yellow	**Yellow**

Wouldn't all 4 items pump just be a problem in terms of limits, expansion? Regular not closure issues.

GUIDANCE ON CLEAN AIR ACT
GENERAL CONFORMITY DETERMINATIONS

1.0 GENERAL

1.1 Statutory Provision

Section 176(c) of the Clean Air Act, codified at Section 7506(c) of Title 42 of the United States Code (42 U.S.C. § 7506(c)), required all Federal agencies to ensure that any agency or agency-supported activity conforms to an EPA-approved state implementation plan (SIP) or EPA-promulgated Federal implementation plan (FIP). This provision was added to the Clean Air Act by the 1977 amendments. Theoretically, if the activity didn't conform, the Federal agency was statutorily precluded from approving or supporting the action. However, without further guidance as to what "conform" meant, many Federal agencies cursorily addressed the conformity issue in their environmental planning analyses conducted pursuant to the National Environmental Policy Act (NEPA).

Dissatisfied with Federal agency compliance with Section 176(c), Congress clarified what "conform" meant in the 1990 Clean Air Act Amendments. "Conformity to an implementation plan" (hereafter "conformity") meant compliance with a SIP/FIP's purpose of attaining or maintaining the national ambient air quality standards (NAAQS). Specifically, Congress said this means ensuring the Federal activity will not:

- Cause or contribute to any new violation of any NAAQS;
- Interfere with maintenance of the NAAQS;
- Increase the frequency or severity of any existing NAAQS violation; and
- Delay timely attainment of any NAAQS, required emission reductions, or interim milestones to achieve the NAAQS.

If the Federal activity does not conform, it cannot be approved or allowed to proceed.

NAAQS are established for six criteria pollutants: ozone (O_3), carbon monoxide (CO), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). For a brief explanation of criteria pollutants, NAAQS, and SIP requirements, refer to the "Air Quality Primer" in Appendix A of this Guide.

Congress also directed the Environmental Protection Agency (EPA) to publish criteria and procedures for determining conformity. Based on the EPA criteria and procedures, each state was directed to revise its SIP to include conformity criteria and procedures for

assessing the conformity of any Federal activity by November 15, 1992. Due to subsequent delays in EPA's publication of its conformity rules, the states were required to submit their conformity revisions to EPA by November 1994 for review and approval.

1.2 Regulations

EPA eventually published regulations clarifying the applicability and procedures for ensuring conformity for transportation projects and non-transportation projects in nonattainment and maintenance areas.[1] EPA's rule for transportation conformity is found at 40 CFR part 51, subpart T. Emissions from activities related to transportation plans, programs, and projects developed, funded, or approved under the Federal Aid Highway Program or Federal Transit Act must meet the transportation conformity procedures and criteria found in 40 CFR part 51, subpart T. Conformity for non-transportation projects is referred to as "general" conformity. EPA's final rules for transportation conformity were published on November 16, 1993 at 58 Fed. Reg. 62188.

EPA's draft rule for general conformity in nonattainment or maintenance areas was proposed on March 15, 1993 at 58 Fed. Reg. 13836. EPA's final rule for general conformity in nonattainment or maintenance areas was published on November 30, 1993 at 58 Fed. Reg. 63214, with an effective date of January 31, 1994. The final general conformity rule established 40 CFR part 51, subpart W which governs requirements that states must include in their SIP revisions. The state's requirements for conformity can be more stringent than EPA's requirements; but, any requirements more stringent than EPA's conformity requirements must equally apply to non-Federal actions. To avoid imposing conformity requirements to non-Federal projects, most of the state submittals on the conformity revisions have essentially mirrored the EPA requirements, which only apply to Federal or Federally-assisted projects.

The portion of EPA's general conformity rule codified at 40 CFR Part 93, subpart B (40 CFR §§ 93.150 thru 93.160) apply to Federal or Federally-supported projects in nonattainment or maintenance areas until EPA approves the state-submitted SIP revisions incorporating the state conformity requirements. Once EPA formally approves

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[1] Maintenance areas are areas that were previously nonattainment for any of the NAAQS, have reached attainment levels, and are redesignated as attainment subject to submission and compliance with an adequate maintenance plan. Maintenance areas are, in essence, former nonattainment areas that are under probation after having demonstrated no violation of the NAAQS for an EPA-designated time period (e.g., 3 consecutive years for ozone). To be redesignated as attainment, section 175A of the CAA requires the state to submit a maintenance plan for the area. The plan must provide for maintenance of the NAAQS for at least 10 years from the anticipated date of redesignation. Eight years after the redesignation date, the state must revise its SIP to provide for maintenance in the area for an additional 10 years (beyond the first 10-year period).

the state version, the state conformity criteria and procedures govern how a Federal agency demonstrates conformity of its project.

For Federal projects in attainment areas, EPA promised to eventually publish further notices of proposed rules on the extent of conformity requirements for Federal projects and how conformity applies to Federal procurement actions (e.g., procurement that leads to a Defense contractor activities in conformity-applicable areas to fulfill the procurement action). Any future EPA general conformity rule for attainment areas is expected to require conformity determinations only in the portion of attainment areas that have exceeded 85% of the NAAQS.

As of the date of preparing this Guide, the Sierra Club is challenging EPA's assertion that conformity is statutorily mandated only for nonattainment and maintenance areas but not attainment areas (even though EPA asserts it can require conformity in attainment areas as a matter of its regulatory discretion). The Sierra Club contends conformity mandatorily applies in attainment areas and is attempting to force EPA to immediately publish conformity requirements for Federal actions in attainment areas. In the absence of specific EPA guidance on conformity in attainment areas and due to the pending litigation, Air Force environmental planners are cautioned to ensure NEPA documents, through traditional NEPA-type analysis, address whether an Air Force project will result in a new violation of the NAAQS for any criteria pollutants.

1.3 Grandfathered Agency Actions

The effective date of the final general conformity rule is January 31, 1994. The final rule doesn't require new conformity determinations fulfilling the final rule's requirements if the Federal agency completed its conformity determination by March 15, 1994 or its NEPA analysis (EIS, EA, or FONSI) prior to January 31. 1994. Nevertheless, Federal actions that are grandfathered from EPA's final rule are still legally required, according to EPA's interpretation, to comply with the statutory conformity requirements. This means the Federal agency's grandfathered actions need not comply with EPA's general conformity procedures and criteria but must somehow demonstrate (e.g., the NEPA analyses sufficiently addresses) that the statutory requirements of Section 176(c) are satisfied (i.e., the action won't cause, contribute to, or exacerbate new NAAQS violations or delay timely attainment of the NAAQS).

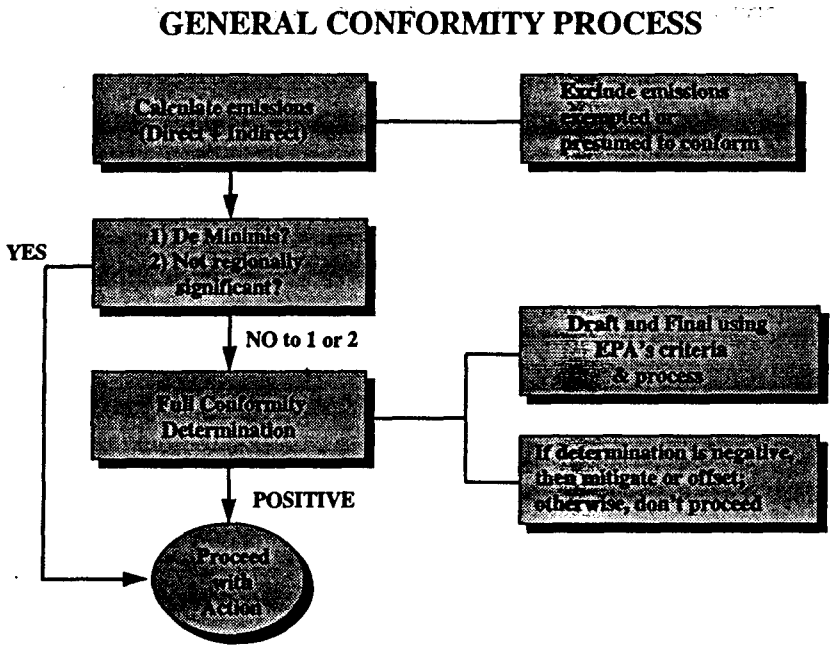
1.4 Agency Responsibility

It is important to note that both Section 176(c) of the CAA and EPA's general conformity rule clearly state that the affirmative responsibility of determining a project's conformity with a SIP or FIP lies with the Federal agency undertaking or supporting the project. Neither the statute nor the regulation requires ultimate concurrence from EPA or the state regulatory agencies with any conformity conclusions made by the agency. However, as discussed in Section 4.2 of the Guide, limited concurrence or commitments from the state

may be needed for Federal agency reliance on SIP emission budgets allocable to project emissions to arrive at a positive conformity determination. Additionally, notifications to the EPA Regional Office, state air quality regulatory agencies, and regional planning organizations are required for full conformity determinations. This is discussed in Section 4.5 of this Guide. Early consultations with the EPA Regional Office, state and regional air quality regulatory agencies, and regional planning agencies will provide invaluable data and clarification on appropriate methodologies to use in preparing conformity applicability analyses and determinations. Early consultation also fosters goodwill and, hopefully, garners some regulatory support for the conformity analysis or determination in the event of subsequent conformity legal challenges to the Federal project.

1.5 EPA's General Conformity Approach

For Federal actions in nonattainment or maintenance areas, EPA's general conformity rule generally establishes the following approach in determining whether the action conforms:



As shown above, EPA's rule allows certain types of actions to escape the rigorous conformity "determination" process. In other words, after undergoing an "applicability" analysis, certain actions are deemed insignificant enough to avoid a full conformity determination. In describing EPA's conformity approach, this Guide will make a distinction between the two types of analyses that Federal actions may have to undergo: applicability analysis and full conformity determination. As will be discussed later, up-front smart planning by a project sponsor can enhance the possibility of the project bailing out at the applicability analysis stage. If the project cannot exit at the applicability analysis stage, a full conformity determination will be required, which includes formal consultation with regulatory agencies, publication of a written conformity determination document, and satisfying EPA's positive conformity "criteria" tests.

2.0 CALCULATION OF PROJECT EMISSIONS

Federal agencies must consider the total direct and indirect annual emission rate of criteria pollutants (ozone precursors, carbon monoxide, particulate matter, nitrogen dioxide, sulfur dioxide, or lead) attributable to a Federal action or Federally-supported, licensed, funded (even partially), or approved action. Direct and indirect emissions that are excludable under EPA's general conformity requirements can be excluded or "carved out" of the total emission calculations. Emissions that are exempted or presumed to conform are discussed in Section 3.1 of this Guide.

The calculations need only include emissions for the type of criteria pollutant for which the area is nonattainment or in maintenance status. If the area is attainment for all criteria pollutants except for carbon monoxide, the Federal agency must analyze and calculate the project-related emissions of only carbon monoxide for purposes of EPA's general conformity rule. In past conformity determinations, several Air Force conformity analyses have erroneously calculated project-related emissions for all criteria pollutants even though the area was attainment for most of the criteria pollutants. This error led to unnecessary expenditures of time, money, and effort to comply with EPA's general conformity rule.

For applicability analysis, only the project's annual emission rate for the *peak year* of project emissions should be calculated to determine whether the project, during its entire lifetime, will exceed certain EPA threshold emission rate levels. An annual emission rate is the amount of pollutant (usually expressed in tons/year) expected to result from the project during a calendar year. As discussed in Section 4.3 of this Guide, if a full conformity determination is required, the Federal agency must calculate the project's annual emission rate for the peak year of emissions, the CAA-mandated attainment year, and any years established as emission budget milestone years in the SIP.

For example, assume a project in an ozone nonattainment area is expected to last five years and result in emissions of 50 tons/year of the ozone precursor nitrogen oxides (NOx) for Year 1; 60 tons/year in Year 2; 30 tons/year in Year 3; 75 tons/year in Year 4; and 120 tons/year in Year 5. The peak year total emissions is 120 tons/year in Year 5. This would be the benchmark project-related emission rate to determine whether EPA's applicability threshold levels were exceeded. You do not total the emissions from all 5 years for purposes of EPA's general conformity rule. If a full conformity determination is required and the SIP establishes emission budget milestones for Years 1 and 4, with Year 4 being the attainment year, the relevant years for conformity emission calculations and the conformity determination would be Years 1, 4, and 5 (the latter being relevant because it is the peak year of emissions).

2.1 Direct and Indirect Emissions

"Direct emissions" are emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal or Federally-supported project and occur at the same time and place as where the project itself.

"Indirect emissions" are reasonably foreseeable emissions of a criteria pollutant or its precursors caused by the Federal project but occur later in time and/or may be further removed in distance from the action itself, *and* the Federal agency can practicably control and will maintain control over the emissions due to a continuing program responsibility of the Federal agency. This definition of "indirect emissions" for conformity purposes differs from the concept of "indirect emissions" used in the context of NEPA.

NEPA indirect emissions are more comprehensive than conformity indirect emissions because NEPA and NEPA regulations promulgated by the Council on Environmental Quality (CEQ) do not limit indirect emissions to those which are within the "practicable control" of the Federal agency. Additionally, EPA's conformity rule allows other certain exclusions from the accountable emissions, which will be discussed later.

An example of NEPA indirect emissions traditionally analyzed in NEPA documents is induced population growth resulting from a Federal project, such as a major BRAC realignment to an Air Force installation. In-bound personnel and their families associated with such a realignment will increase the regional population. Many of the off-base activities of these personnel and their family members, such as recreational activities or non-duty related private vehicle usage, are beyond the Air Force's control. Additionally, the regional growth attributable to the in-bound personnel and families may indirectly lead to increased off-base commercial activities, such as new Seven-Eleven convenience stores or dry cleaner operations. Again, these type of activities or induced growth in pollutant-emitting sources are beyond the Air Force's practicable control. Under NEPA, the emissions attributable to these types of activities should somehow be analyzed in the NEPA analysis through sound, predictive methods. Under EPA's general conformity rule, emissions associated with these types of activities aren't included in the emission calculations. Note that the criteria pollutant emissions associated with the off-base portion of employee commutes to and from work are accountable under EPA's general conformity rule, unless those emissions have been included in a transportation conformity analyses by the regional transportation planning agency.

2.2 Mobile, Area, and Stationary Point Sources

Emissions from mobile, area, and stationary point sources are subject to conformity requirements. In other words, all project-related sources of criteria pollutant emissions, including aircraft and on-base family housing emissions, must be considered unless the emissions from the source are specifically excluded under EPA's general conformity rule, as discussed in Section 3.1 of this Guide. Examples of some of the specific exclusions include sources that were considered by the regional transportation planning agency who published a transportation plan thereby fulfilling EPA's transportation conformity rule, source emissions beyond the Federal agency's practicable control, and direct emissions from sources that must undergo "new source review" requirements established in the SIP.

2.3 Reasonably Foreseeable

Only indirect emissions that are reasonably foreseeable as of the time the determination is made need be considered. Reasonably foreseeable emissions are projected future indirect emissions that are: (1) identifiable at the time the conformity determination is made; (2) the location of such emissions is known; and (3) the emissions are quantifiable. A good rule of thumb is that if the project emissions are sufficiently "reasonably foreseeable" for NEPA purposes, they are sufficiently "reasonably foreseeable" for purposes of EPA's general conformity rule. Consult your environmental planner on whether future project emissions are capable of being forecasted or predicted under existing analytical methods used for NEPA purposes.

Although EPA's general conformity rule does not specify whether the calculated emissions should be based on the source's "potential to emit" or "expected actual" emissions, EPA issued a "Questions and Answers" guidance document stating that calculations should be based on expected actual emissions, not the source's potential to emit. For those of you who are not familiar with the distinction, a source's potential to emit can seriously exaggerate the amount of emissions one would reasonably expect from a source. For example, the potential to emit concept assumes full, continuous operation of a source for nearly 24 hours a day, 365 days per year, even though one would not reasonably expect the source to operate that continuously or on that frequency. Conversely, calculating a source's expected future emissions based on expected actual emissions allows reasonable or realistic assumptions about how the source will actually be operated.

2.4 Precursors

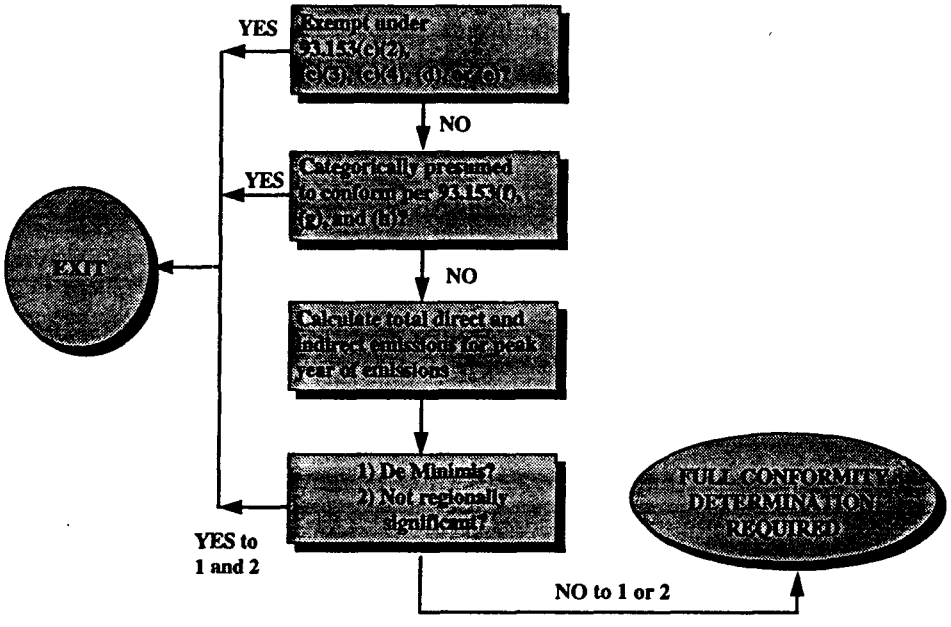
Total direct and indirect emissions include precursors of criteria pollutants, primarily O_3 precursors (volatile organic compounds or "VOCs" and nitrogen oxides or "NO_x") and possibly PM_{10} precursors (e.g., sulfur oxides or "SO_x"). Both VOCs and NO_x must be considered for ozone nonattainment areas unless EPA approves a demonstration by the local or state air agencies that NO_x reductions are not required to combat ozone nonattainment. Precursors of PM_{10} must be considered if the SIP provides for control of

PM_{10} precursors to achieve attainment for PM_{10}. Types of PM_{10} precursors that must be considered are the types of PM_{10} precursors identified in the SIP as requiring some measure of control.

3.0 APPLICABILITY ANALYSIS

The following is a simplistic, general logic flow for the portion of EPA's general conformity rule pertaining to the applicability analysis.

CONFORMITY APPLICABILITY ANALYSIS



If the Federal project meets any of the following, then a full conformity determination is not required.

- Action falls within one of the exemptions in 40 CFR §§ 93.153(c)(2) thru 93.153(e)

- Action falls within the list of categorical presumptions of conformity published by the Federal agency in the Federal Register. 40 CFR § 93.153(f).

- Calculate total direct and indirect emissions, less any allowable exclusions, of the project for the project's peak year and determine if the emission rate is below the EPA's "de minimis" threshold rates and if the project is otherwise deemed "regionally significant" by EPA's definition. 40 CFR §§ 93.153(b), (c)(1), and (i).

3.1 Exemptions

The exemptions in 40 CFR §§ 93.153(c)(2) thru (e) can be used to exclude the action if the action meets the exemption description. Additionally, portions of the project that meet the exemption description can be excluded from the emission calculations for the project. These exemptions are:

- Action falls within any of the 21 "clearly de minimis" categories of actions listed in 40 CFR § 93.153(c)(2). Some of the more important categories include, but are not limited to:

  - Continuing and recurring activities where activities conducted are similar in scope and operation to activities currently being conducted (e.g., changing the use of an office building to another type of administrative use with about the same number of employees).

  - Routine maintenance and repair.

  - Administrative actions such as personnel actions and organization changes.

  - Routine, recurring transportation of materiel and personnel.

  - Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (no new support facilities or personnel are needed) to perform as operational groups and/or for repair or overhaul.

  - Granting of leases, licenses, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted.

  - Actions associated with transfers of land, facilities, and real properties through an enforceable contract or lease agreement where delivery of the deed must occur promptly after meeting the requirements of CERCLA and where the Federal agency doesn't have practicable control over the subsequent reuse of the properties.

  - Transfers of real property and related personal property from one Federal agency to another Federal agency for final disposition of the property.

- Action whose emissions are "not reasonably foreseeble" per 40 CFR § 93.153(c)(3), where EPA lists 2 examples of actions that meet this exemption.

- Action that implements a decision to conduct or carry out a conforming program (i.e., a program that has already undergone a conformity analysis or determination). 40 CFR § 93.153(c)(4).

- Action falls within any of the 5 categories of actions listed in 40 CFR § 93.153(d), regardless of the amount of emissions associated with the action. The following are the 5 categories.

  - Major new or modified stationary source requiring a permit under the new source review (NSR) or prevention of significant deterioration (PSD) program (this is not to be confused with the more broad Title V permit program where a source may need a Title V permit but not a permit due to NSR or PSD).

  - Actions in response to emergencies or natural disasters that are commenced immediately after the emergency or disaster occurs due to overriding concerns for public health and welfare, national security interests, or foreign policy commitments. Actions taken as a continuing response to the emergency or disaster more than 6 months after the commencement of initial response actions can also be exempted under 40 CFR § 93.153(e) so long as the Federal agency makes a written determination that, for a specified period not exceeding an additional 6 months, it is impractical to prepare the conformity analyses and the actions cannot be delayed due to concerns for public health and welfare, national security interests, or foreign policy commitments.

  - Research and development activities and other studies or investigations that don't result in environmental detriment or the activity furthers air quality research as determined by the state air regulatory agency.

  - Alteration and additions of existing structures as specifically required by new or existing environmental legislation or regulations (e.g., hush houses for aircraft engines and scrubbers for air emissions).

  - Direct emissions from remedial and removal actions carried out under CERCLA and associated regulations (e.g., National Contingency Plan) to the extent such emissions either comply with substantive NSR/PSD requirements through the CERCLA applicable

or relevant and appropriate (ARAR) process or are otherwise exempted from environmental regulation under CERCLA or CERCLA regulations.

3.2 Categorical Presumptions of Conformity

40 CFR §§ 93.153(f), (g), and (h) provide a Federal agency rulemaking mechanism whereby each Federal agency can develop categories of activities excludable from the general conformity requirements. The excludable categories are actions whose emissions, based on the Federal agency's past experience, have historically been below EPA's de minimis threshold levels and thereby are presumed to conform. The agency's categorical presumptions of conformity (or "categorical exclusions") must be submitted to EPA with supporting data and published in the Federal Register for public review and comment.

If a project proponent has available data indicating a specific action normally falling within a categorical exclusion may actually result in emissions above de minimis levels, the Federal agency must otherwise demonstrate the project conforms or is excluded from the requirement to conduct a full conformity determination. Additionally, the Federal agency must ensure that the activity's total direct and indirect emissions of any pollutant do not equal or exceed 10% of the nonattainment or maintenance area's total emissions of that pollutant. Otherwise, the project is deemed "regionally significant" by EPA's definition in the general conformity rule and must undergo a full conformity determination.

If you encounter recurring actions not already covered by any of EPA's exemptions and that consistently have been shown to result in emission levels below EPA's de minimis levels, please forward a description of the action with your emission calculations to Air Staff through your major command (MAJCOM). Air Staff will evaluate your submittals to consider adding these actions to its proposed list of categorical presumptions of conformity.

3.3.2. De Minimis Exemption.

40 CFR § 93.153(c)(1) exempts de minimis projects from the requirement to perform a full conformity determination. De minimis projects are those with total annual direct and indirect emissions less than de minimis theshold levels listed in 40 CFR § 93.153(b) during the peak year of emissions, so long as the project's emissions are not "regionally significant" per 40 CFR § 93.153(i). The de minimis threshold rates for nonattainment areas differ from the de minimis levels for maintenance areas for certain pollutants. Again, it is important to emphasize that *only* those pollutants for which the area is designated nonattainment or maintenance need be analyzed under EPA's general conformity rule.

In determining whether an action results in emissions below de minimis thresholds, the Federal agency can "carve out" exempted emissions and then compare the remaining emissions against the de minimis levels. Even if the project falls below the de minimis level, the Federal agency must ensure the project is not "regionally significant." (i.e., total project-related emissions cannot equal or exceed 10% of the air quality management area's (AQMA's) total emissions for the pollutant of concern). Exceeding 10% of an AQMA's total emissions budget while also falling below the de minimis rate would probably be quite rare but could possibly occur in an area with a small PM_{10} emissions inventory.

The de minimis concept clearly demonstrates the need for the Federal agencies to carefully craft their project proposals with up-front mitigative features built into the design or description of the proposal. This type of careful planning will ensure the project has a better chance of not exceeding the de minimis emission rates. If the de minimis emission levels are not exceeded by the project during any project year, the Federal agency does not have to do a full conformity determination satisfying EPA's conformity criteria in 40 CFR § 93.158 or EPA's reporting and public participation requirements in §§ 93.155 and 93.156. Mitigative features that can be incorporated into the original project proposal include: Technical designs and mandatory implementation of good management practices to reduce emissions, process changes and chemical substitutes to avoid emissions of nonattainment criteria air pollutants, and smart project scheduling to avoid creating a spiked peak year of emissions exceeding de minimis levels. An example of the latter is scheduling the phase down of certain activities with the simultaneous build up of other activities so that the net emission increase does not exceed de minimis levels. Another example is to avoid, if possible, a construction schedule that compresses all construction activities in one calendar year if PM_{10} is a pollutant of concern or if construction equipment is a major source of other pollutants of concern.

To help illustrate this concept with a hypothetical example, assume a Federal agency will approve a project in an area that is moderate nonattainment for ozone. The de minimis levels for the ozone precursors, volatile organic compounds (VOCs) and nitrogen oxides (NO_x), are 100 tons/year for each precursor. The proposed project, without any mitigative design features, is expected to result in 110 tons/year of NO_x and 60 tons/year of VOCs. VOCs are no longer a concern because they fall below the VOC de minimis level, but the 110 tons/year of NO_x exceed the 100 tons/year de minimis threshold rate. The Federal agency must conduct a full conformity determination for the project's NO_x emissions and, most likely, will have to offset the entire 110 tons/year of NO_x unless another conformity criteria is used. In California, the cost of a ton/year of NO_x offsets can range from $ 15,000 to $ 20,000. The total cost of purchasing offsets for the entire 110 tons/year of NO_x could run $1.65 million to $ 2.2 million. If the Federal agency had originally crafted the project proposal with mitigation built into the proposal so that the project-related annual NO_x emissions would only be 90 tons/year, the agency would not need to obtain or purchase NO_x offsets to achieve conformity. For this hypothetical, the 20 ton/year

difference between designing the proposal with mitigative features versus without such features could cost the Federal agency a large sum of money, not to mention the additional effort of complying with the additional procedural requirements of a full conformity determination. Some would contend this suggested approach is a paper strategy to avoid benefitting the environment. To the contrary, this approach ensures financial and time-savings motivation for Federal agencies to use better environmental planning in designing their proposals that, in the end, result in increased environmental benefits.

Recall that calculating project-related emissions is a netting approach. The Federal agency should calculate emission decreases and increases associated with implementing a project to arrive at a net emission increase. It is the net emission increase that is compared to the de minimis levels. If the Federal agency's project-related activities will coincide with the agency's elimination of another activity in the same area and there is some relationship between the plus-up and drawdown, the description of the proposed project should include both to allow the netting approach in determining whether the proposed project is de minimis. The project description for conformity purposes should generally be consistent with the project description used in any parallel NEPA documentation. Failure to take advantage of the netting concept can can unnecessarily cost the Federal agency time and money in preparing a full conformity determination when one wasn't required had the project proposal been properly crafted to use the netting approach to the agency's benefit. If the reduced activity is not included as part of the description of the proposed project, the agency will be forced to calculate the emission increases of the project, compare the emission increases against the de minimis threshold rates without consideration of the reduced emissions resulting from the reduced activity, conduct a full conformity determination if the de minimis rate is exceeded, and only then can consider the reduced emissions of the reduced activity in offsetting the project's emissions. Unfortunately, once the project no longer qualifies for the de minimis exemption, the benchmark level for offsetting increased emissions is to a zero increase level and not to the de minimis levels. The key is that once a need for a full conformity determination is triggered (i.e., exceeds de minimis), the de minimis levels are no longer relevant and the agency must mitigate or offset the project-related emissions to conformity (i.e., usually a zero level) and not to a level just below or at the de minimis rate.

To better illustrate this with another hypothetical example, again assume a Federal agency will approve a project in an area that is moderate nonattainment for ozone. The de minimis levels for the ozone precursors, volatile organic compounds (VOCs) and nitrogen oxides (NO_x) are 100 tons/year for each precursor. The proposed project includes new activity levels at the installation that are expected to add 120 tons/year of VOCs and 150 tons/year of NO_x during the peak year of project emissions. However, some existing activity levels at the installation are expected to decrease, partially due to the new project. The emission decreases in VOCs and NO_x from the reduced activities are 40 tons/year and 60 tons/year, respectively, for the same peak year. Using a netting

approach would result in net emission increases of 80 tons/year of VOCs and 90 tons/year of NO_x for the peak emissions year. Both of these levels are below the 100 ton/year de minimis level and, assuming the project is not regionally significant, no conformity determination would be required and no offsets would be needed. If a netting approach was not used in the initial description of the project, the agency would have to conduct a full conformity determination and possibly purchase or otherwise obtain offsets for the 120 tons/year of VOCs and 150 tons/year of NOx. Some of the offsets could be obtained by an after-the-fact consideration of the reduced activity level of emissions (40 tons/year VOCs and 60 tons/year NOx), but that would leave 80 tons/year of VOCs and 90 tons/year of NO_x emissions that must be offset or reduced to a zero level. At a potential cost of $ 15,000 to $ 20,000 per ton of VOC/NO_x offsets, the failure to describe the project in a manner to maximize the use of the netting approach could cost the Federal agency 2.55 million to 3.4 million dollars to just purchase offsets. This doesn't include the costs and time wasted in unnecessarily preparing a full conformity determination.

The following are EPA's de minimis thresholds for nonattainment and maintenance areas.

TABLE 3.1

DE MINIMIS THRESHOLDS FOR NONATTAINMENT AREAS

CRITERIA POLLUTANT	NONATTAINMENT STATUS	TONS/YEAR
OZONE (VOCs & NOx)	Marginal/Moderate Outside Ozone Transport Region	100
	Serious	50
	Severe	25
	Extreme	10
VOCs	Marginal/Moderate Within Ozone Transport Region	50
NOx	Marginal/Moderate Within Ozone Transport Region	100
CARBON MONOXIDE	All	100
PARTICULATE MATTER (PM_{10})	Moderate	100
	Serious	70
SULFUR/NITROGEN DIOXIDE (SO_2/NO_2)	All	100
LEAD (Pb)	All	25

TABLE 3.2

DE MINIMIS THRESHOLDS FOR MAINTENANCE AREAS

CRITERIA POLLUTANT	MAINTENANCE AREA	TONS/YEAR
OZONE (NO_x only)	All	100
OZONE (VOCs only)	Within Ozone Transport Region	50
	Outside Ozone Transport Region	100
CARBON MONOXIDE	All	100
PARTICULATE MATTER (PM_{10})	All	100
SULFUR/NITROGEN DIOXIDE (SO_2/NO_2)	All	100
LEAD (Pb)	All	25

3.3.3 Documenting Applicability Analysis

If an action is deemed to be exempt from the requirement for a full conformity determination, EPA's general conformity does not require the applicability analysis, including any de minimis analyses, to undergo public or regulatory review nor be documented in any written fashion. However, it would be advantageous to have an internal agency written record explaining how the project was deemed to be exempt in the event litigation ensues challenging the Federal action on conformity grounds. As a matter of prudence, the Federal agency should maintain some form of written documentation of how a project was exempted from the full conformity determination requirement. If the project emissions were deemed to fall below de minimis levels, the documentation should, as a minimum, include a description of the proposed project as analyzed, assumptions used in the analysis, calculation methods, emission calculations, and persons involved in preparing the applicability analysis.

4.0 FULL CONFORMITY DETERMINATION

4.1 NEPA and Conformity

EPA's general conformity rule does not require that corresponding NEPA documents (environmental impact statement, environmental assessment, or documentation of NEPA categorical exclusion) for the Federal project contain a conformity applicability analysis or conformity determination. EPA encourages, but does not require, integrating any needed conformity analyses or determinations into the NEPA process to avoid duplication of effort in complying with public participation and agency notification requirements for NEPA and EPA's general conformity rule.

It is Air Force policy to keep conformity calculations separate from the NEPA analysis of air quality impacts. Prepare a separate conformity document that includes emission calculations and analytical results using EPA's general conformity methods and guidance. It is advisable to prepare the NEPA and conformity documentation concurrently to ensure all aspects of required environmental compliance are analyzed in a timely manner and to promote concurrent calculations of project-related emissions in a NEPA-compliant and conformity-compliant manner. Within the air quality section of the NEPA document, include a brief explanation of conformity and a short description of how the proposed action conforms to the SIP or FIP or why the proposed action is exempt from the requirement to conduct a full conformity determination. Ensure the NEPA air quality section informs the reader that the public will receive notice of the publication and availability of the draft and final conformity determination (if a full conformity determination is required) and that the public will be provided an opportunity to provide written comments on the draft conformity determination for inclusion in the final conformity determination. Deviations from this policy require prior written approval from HQ USAF/CEV.

The Air Force considered several advantages and disadvantages in requiring a separate companion conformity document to the NEPA documentation. The advantages of preparing a separate companion document include the following. First, NEPA requires analysis of the proposed action and reasonable alternatives to the proposed action. Inclusion of the conformity determination in the NEPA document would logically call for conformity determinations of the proposed action *and the alternatives*, thus multiplying the amount of effort to analyze conformity. Nothing in the Clean Air Act or EPA's conformity rule requires a conformity analysis or determination for project alternatives, unless the agency eventually decides to implement an alternative in lieu of the proposed action. Second, the total emissions that must be considered for conformity may differ and are usually less comprehensive than the emissions traditionally analyzed for NEPA purposes. EPA developed a hybrid exclusionary definition of "indirect emissions" for conformity purposes that does not necessarily track the scope of "indirect impacts" for NEPA purposes. EPA's general conformity rule also allows exclusions or "carve outs" of certain types of emissions from the conformity emission calculations, whereas NEPA

does not. NEPA requires consideration of cumulative impacts whereas no similar requirement exists under EPA's general conformity rule. Third, Federal agencies traditionally use conservative estimation methodologies for NEPA whereas the agencies would probably employ more "precise" estimations of foreseeable project-related emissions for conformity purposes. This difference in estimation methodologies stems from the lack of absolute, substantive standards under NEPA versus the absolute, "thou shalt not approve the project" mandate of conformity. Even EPA acknowledged that analytical variances could occur between conformity and NEPA emission calculations and procedures. Presenting two sets of emissions data in the same document to fulfill both NEPA and conformity could cause confusion among the readers of the document concerning the extent of project-related air quality impacts. Preparing a separate conformity document parallel to the NEPA process allows independent document preparation and minimal schedule disruptions in case one of the two is delayed for whatever reason.

Conversely, the Air Force acknowledges there are some advantages to integrating conformity analyses and determinations into the NEPA process. If a manageable emissions estimation and presentation method could be used to present the project-related air quality impacts in one document that satisfies both NEPA and conformity, time and monetary savings would be realized from avoiding duplication of effort. There is also the compelling rationale that discussing the project's conformity in the NEPA document is required by NEPA and CEQ regulations since NEPA mandates full disclosure of the project-related air quality impacts, including whether the pollutant emissions are inconsistent with the goals or requirements of the applicable state or Federal implementation plan or would otherwise cause a violation of a local, state, or Federal air quality standard. Another advantage of NEPA/conformity integration is simultaneous use of similar public participation and agency notification procedures required under NEPA and CEQ regulations.

Again, it is Air Force policy to prepare separate conformity and NEPA documents. Even though the Navy has successfully demonstrated the ability to integrate both into one document, Air Force project proponents must obtain Air Staff permission to deviate from Air Force policy prior to preparing the conformity document.

Several excellent examples of conformity determinations complying with Air Force policy have already been completed by certain MAJCOMs. Headquarters Air Mobility Command (HQ AMC) has published two exemplary conformity determinations implementing Air Force policy on conformity for realignment actions to Travis AFB and McGuire AFB. Please contact HQ AMC/CEV or HQ USAF/CEVC if you need a copy of these documents. Similarly, the Navy has produced several excellent examples of conformity determinations that may provide assistance in emissions calculation methodology for various sources. Contact your regional compliance office to obtain a Navy point-of-contact who may be able to obtain a copy for you. Prior to using Navy methodology for calculating aircraft emissions, please contact HQ USAF/CEVC or

AFCEE/EC for the most recent Air Force guidance on methods to estimate military aircraft emissions.

4.2 Criteria for Determining Conformity (§ 93.158)

To demonstrate that the standards in Section 176(c) of the CAA are met, a Federal action undergoing a full conformity determination must satisfy two types of EPA conformity criteria. The two types of conformity criteria are "air quality" and "emissions related" criteria. The "air quality" criteria are described at 40 CFR § 93.158(a) discussed in Section 4.2.1 below. The "emissions related" criteria are found at 40 CFR § 93.158(c) and discussed in Section 4.2.2 of this Guide.

From an analytical perspective, the "air quality" criteria are the key focus of the conformity determination. Generally, these criteria are various tests to determine if project-related emissions:

- Are included in an EPA-approved SIP emission budget;
- Could use excess capacity in an EPA-approved SIP emissions budget;
- Could be included in a state commitment to revise its SIP emissions budget;
- Could be modeled to show no incremental effect resulting in a NAAQS violation;
- Could be offset or mitigated to conforming levels consistent with the SIP emissions budget; or
- Are shown to result in no net increase when compared to an installation's historic baseline aggregate level of emissions if EPA has not yet approved an area's SIP emissions budget.

Which of the above criteria can be used to satisfy EPA's "air quality" leg of the conformity test will depend on the type of pollutant involved, whether the pollution problem is a local or regional scale concern, the status of EPA approval of the area's SIP, the availability of emission offsets, and the ingenuity of the project planner.

4.2.1 "Air Quality" Conformity Criteria (§ 93.158(a) and (b))

A project can be demonstrated to satisfy the "air quality criteria" for the pollutant(s) of concern by *any* of the following methods:

a. For any criteria pollutant of concern, the full emission impact of the action is specifically identified and accounted for in the SIP/FIP;

b. For ozone (O_3) or nitrogen dioxide (NO_2), the full emission impact of the action is offset through a revision to the SIP or similarly enforceable means that results in no net increase in pollutant emissions;

c. For carbon monoxide (CO) or particulate matter (PM_{10}), air quality modelling shows the total emission impact doesn't result in any new or more frequent or severe NAAQS violations (must be EPA-approved areawide or local modeling using the latest MPO planning assumptions, where the regulatory agency primarily responsible for the SIP decides whether local or areawide modeling is more appropriate);

d. For ozone (O_3) or nitrogen dioxide (NO_2), and, in certain situations, for partial fulfillment of conformity demonstration for carbon monoxide (CO) and particulate matter (PM_{10}), each portion of the action or the action as a whole meets *any* of the following:

(1) Where the U.S. EPA has approved a revision to the area's attainment or maintenance demonstration since 1990, the state concluded that:

(a) The emission impact of the project would fit, together with all other emissions in the nonattainment area, within the SIP emissions budget; or

(b) The emission impact of the project won't fit within the SIP emissions budget but the state governor or his/her designee for SIP actions makes a *written commitment* that includes *all* of the following:

1. A specific schedule to adopt and submit a SIP revision that accounts for the needed emission reductions prior to the time emissions from the Federal project would occur;

2. Identification of specific measures to be incorporated into the SIP to achieve an overall level of emissions that won't exceed the SIP emissions budget;

3. Demonstration that all existing applicable SIP requirements are being implemented for the pollutant of concern and the state has fully sought authority to implement additional requirements;

4. Determination that the Federal agency has required *all reasonable mitigation measures* associated with its action; and

5. Written documentation including all air quality analyses supporting the conformity determination.

(2) The action is already included in a conforming transportation plan and improvement program, as determined by the local metropolitan planning organization (MPO) or regional planning agency responsible for transportation plans and programs;

(3) The emissions from the action are fully offset through enforceable measures similar to a SIP revision; or

(4) In an area where EPA has not approved a SIP revision since 1990, the total emissions from the action do not increase emissions with respect to specified baseline emissions for the geographic area affected by the proposed action.

The following subsections further describe some of the above "air quality" criteria.

4.2.1.1 Project Emissions "Specifically Identified and Accounted for" in an EPA-approved SIP or EPA-promulgated FIP

The 1990 Clean Air Act Amendments require that each SIP contain an emissions budget for interim milestone years and the attainment year for certain nonattainment criteria pollutants, such as ozone precursors and PM_{10}. These emissions budgets, often referred to as future year emission inventories, generally provide an emission allocation by types of sources within the area covered by the SIP. Normally, the emission allocations are tied back to a baseline year SIP emission inventory, which in most nonattainment areas is the 1990 baseline emissions inventory for the entire area. Future year emission inventories are emission projections made by the regional or state air quality regulatory agency that also include projected emissions associated with regional population growth and vehicle traffic usage made by a regional planning organization such as a metropolitan planning organization (MPO) or Council of Governments (COG). Future year emissions inventories can also include project-specific emission allocations. These future year emission inventories are updated and submitted to EPA for review and approval as SIP

revisions. Certain future year emission inventories must be submitted by statutorily mandated dates, such as VOC 15% rate-of-progress plans for areas that were moderate or worse nonattainment for ozone as of November 15, 1990 and which had to be submitted by the state to EPA by November 15, 1993.

EPA's general conformity rule, 40 CFR § 93.158(a)(1), provides positive conformity for any project whose emissions are *specifically identified and accounted for* in the relevant future year emission inventories that are approved by EPA. EPA states that this means the project must be referenced by name or some other form of specific reference in the EPA-approved SIP's future year emission inventories. To use this criteria, the area's future year SIP emissions inventory for the pollutant of concern must be approved by EPA.

The Air Force's limited experience with this criteria indicates, thus far, it has not been a practicable solution for Air Force projects undergoing conformity determinations. Generally, state and local air quality regulatory staff are reluctant to include project-specific emission allocations, much less an increase in a specific source's overall emissions, in future year emission inventories. However, several California air districts have submitted future year emission inventories to EPA that include increased project-specific emission allocations for future growth at DOD installations.

Even if project-specific allocations are provided for an Air Force project, EPA thus far has not been able to approve SIP revisions in a timely enough manner to allow effective use of this criteria. SIP revisions with any future year emission allocations must be approved by EPA, not simply submitted to EPA for review, before the Federal agency can rely on the future year project-specific emission allocation as a basis for positive project conformity. In practice, this means the Air Force proponent of a project must try to calculate with some reasonable certainty the amount of emissions necessary for the proposed project, submit its calculations to the state SIP agency, allow sufficient lead time for the state SIP agency to incorporate the project-specific allocation in its development of the next SIP submittal, and allow sufficient lead time for EPA to review and approve the SIP revision submittal. This could require a minimum lead time of two to three years prior to Federal agency approval of the project. As of March 1995, EPA has just barely begun to grant approvals to SIP revisions submitted by states in November 1993 due to its vast workload.

Nevertheless, Air Force installations are encouraged to confer with state SIP agencies and MPOs about future projects and try to convince the SIP agency to allocate project-specific emission budgets for the project in future SIP revisions. The best approach is to convince the SIP agency to allocate additional emission budgets for the entire Air Force installation to accommodate future growth. If reasonable projections of future motor vehicle traffic to and from the installation are available, submit those projections to the MPO or other regional planning agency responsible for the region's transportation plan. If the regional planning agency includes those motor vehicle projections in its transportation

plan, which must undergo a transportation conformity analysis performed by the regional planning agency, then future motor vehicle traffic to and from the installation consistent with the numbers provided to the planning agency are exempt from the Air Force general conformity determination. This is especially crucial for areas that are nonattainment for carbon monoxide, since it is difficult to limit or offset carbon monoxide emissions resulting from employee motor vehicle commutes to and from the Air Force base.

4.2.1.2 Project Emissions Plus All Other Emissions in SIP Area Won't Exceed Future Year Emission Inventory

An EPA-approved SIP may "accommodate" a project if project emissions plus emissions from all other sources in the SIP area don't exceed the SIP's future year emission inventory for all sources. If this accommodation is certified by the local SIP agency, the project satisfies EPA's "air quality" conformity test. This "accommodation" criteria differs from the criteria in Section 4.2.1.1 above in that the project need not be "specifically identified and accounted for" in the SIP future year emission inventories. To be able to use this criteria, the SIP future year emission inventories must be EPA-approved and reflect a level of emissions for all SIP sources that falls below the SIP level necessary to achieve NAAQS attainment. The SIP excess capacity, or slack, can be allocated by the local SIP agency to new, unexpected sources. The project proponent cannot unilaterally assign itself a portion of the emission slack. This criteria requires that the state agency responsible for the SIP provide written approval to the Federal agency indicating the SIP agency's allocation of some or all of the slack to the Federal agency's proposed project.

Air Force project proponents are encouraged to consult early with the SIP agency to determine whether SIP future year emission inventories have any slack and whether the SIP agency will entertain the notion of allocating some or all of the slack to accommodate the proposed project emissions. Depending on the amount of slack available, the SIP agency may be reluctant to allocate any slack due to uncertainties in the state's future year emission inventory projections, such as underestimation of regional population growth that won't be discovered until later when new SIP submittals are due to EPA.

Air Force project proponents can aid the SIP agency in allowing Air Force use of this criteria by demonstrating where possible slack exists in the area's SIP emission budget. Often, the SIP agency may have a line item emissions total for military aircraft for the entire area. The SIP agency may have used imprecise emission estimation methods for military aircraft or used inflated military flight operations data that leads to an overall overestimation of future year military aircraft emissions. It requires a considerable amount of tact in politely pointing out these errors without appearing to criticize or impugn the professional competence of the SIP agency staff. Keep in mind that they may have to explain to their superiors and EPA how they overestimated emissions for a formal SIP submittal. Working with the SIP agency staff as team members rather than as protagonists may help convince them to allocate the overstimation of emissions in their future year SIP emission inventory to your specific project.

4.2.1.3 Offsetting Emissions

Due to the difficulty and costs associated with obtaining offsets for project-related emissions, this option would most likely be the least preferred approach in demonstrating satisfaction with EPA's "air quality" criteria. The project proponent must offset the project-related emissions of pollutants of concern to a conforming level, which often is a "no-project" level. In certain circumstances, the conforming level may equate to a historic baseline level for the entire installation, which could be less drastic than a "no-project" level, as explained in Section 4.2.1.5 below.

If offsets are readily available and can be obtained at little to no cost, this option can be the most expedient method of satisfying the "air quality" conformity criteria. The offsets may be obtained from past or simultaneous reduction of DOD activities elsewhere within the air basin. An example would be the drawdown of military activities at another Air Force base in the air basin due to BRAC. If the timing of the drawdown occurs after 1990 or coincides with the project undergoing a conformity determination, the permanent reduction of emissions from the closure base activities can be allocated by Air Force Secretariat level officials to the Air Force agency requiring the offsets. The agency requiring the offsets must submit a formal written request for the offsets through Air Force channels. Another potential source of offsets may be another Federal agency that is reducing pollutant-emitting activities within the air basin. Again, the Air Force agency requiring the offsets must submit a written request through Air Force channels so that the Air Force Secretariat can submit a formal request to the other Federal agency. The written request must, as a minimum, quantify and justify the amount of offsets needed, identify the time period when the project-related emissions requiring offsets would occur, identify and quantify the offsets that would be generated by the reducing activity (if the information is available), and explain what mitigations the requesting agency has planned for the project to minimize the amount of offsets needed.

Offsets can generally be categorized into two groups. One group is emission reduction credits (ERCs) that are marketable and established by the local air quality regulatory agency's rules. These ERCs traditionally represent a percentage of the permanently reduced emissions from a stationary or area source (although some areas have created programs that allow creation of ERCs from the permanent disuse of mobile sources, such as scrapped motor vehicles). The local regulatory agency's rules govern how the ERCs can be created, used, and transferred. The ERC program may even allow for banking of ERCs for future use. ERCs often are expensive, depending on the type of pollutant, and can range in value up to $ 20,000 per ton of nitrogen oxides. Additionally, many air quality nonattainment or maintenance areas do not have an ERC program that would allow use of ERCs for conformity purposes. To use ERCs as offsets for conformity, the ownership of ERCs would have to be transferred to the project proponent and then permanently retired pursuant to local ERC rules. Prior to a project proponent being able to declare that a project positively conforms due to offsetting of emissions with ERCs, the

agency must first obtain the ERCs or provide a legally enforceable commitment to obtain the ERCs. Simply stating an unenforceable intention or promise to obtain the necessary amount of ERCs in the future is not enough to satisfy EPA's general conformity rule.

The second group of offsets are commonly referred to as "conformity offsets" that represent permanent emission reductions beyond those emission reductions qualifying as ERCs. Although ERCs are a subset of "conformity offsets", local ERC rules may limit the types of sources (e.g., only stationary sources) that can be used to create ERCs. "Conformity offsets" include sources not covered by local ERC rules, such as mobile sources (e.g., military aircraft emissions). EPA's general conformity rule does not limit the types of offsets usable for conformity to ERCs. EPA only requires that the offsets represent emission reductions that are quantifiable, consistent with SIP attainment and reasonable-further-progress demonstrations in the SIP, surplus to reductions required by and credited to other SIP provisions, enforceable at both the state and Federal level, and permanent. This means that "conformity offsets" must be from source emission reductions that the current SIP doesn't already show as being phased out or reduced in the future, must be Federally enforceable by a mechanism such as a NEPA decisional document signed by an appropriate agency official, and must be quantifiable with credible precision. A classic example of "conformity offsets" are emission reductions associated with cessation of military aircraft activity in an air basin due to BRAC. Military aircraft emission reductions don't fall withing a local regulatory agency's ERC rule but nevertheless can meet EPA's definition of "offset." Normally, the SIP future year emissions inventory shows a level, constant amount of emissions for military aircraft emissions based on historical data because the SIP agency is preempted from regulating or controlling the amount of military aircraft emissions. The Federal agency in charge of the military aircraft can allocate the emission reductions from permanent cessation of the military flights in a legally enforceable decisional document (e.g., NEPA Record of Decision) to the agency needing the offsets.

As will be explained further in the following discussion on modeling, projects in certain air quality nonattainment or maintenance status for local-scale pollutants, such as carbon monoxide, must meet EPA's conformity modeling criteria, even if the amount of project-related pollutant emissions are fully offset.

4.2.1.4 Modeling

For certain pollutants of concern (i.e., carbon monoxide, PM_{10}, and sulfur dioxide), EPA's "air quality" criteria test can be satisfied by model demonstrations that the project-related emissions won't increase the frequency or severity of existing NAAQS violations and won't cause or contribute to new NAAQS violations. The modeling demonstration must be performed using an EPA-approved model and EPA-approved modeling guidelines and emission factors. Under EPA's general conformity rule, modeling can *never* be used by a project proponent to demonstrate conformity for *ozone or nitrogen dioxide.*

EPA's modeling criteria addresses three situations: (1) where the nonattainment problem is deemed by the local air quality regulatory agency to be only a local-scale ("hotspot)' problem; (2) where the nonattainment problem is deemed by the regulatory agency to be only an area-wide problem (no "hotspot" problem); and (3) where the regulatory agency deems the nonattainment problem is both a local scale and areawide scale problem.

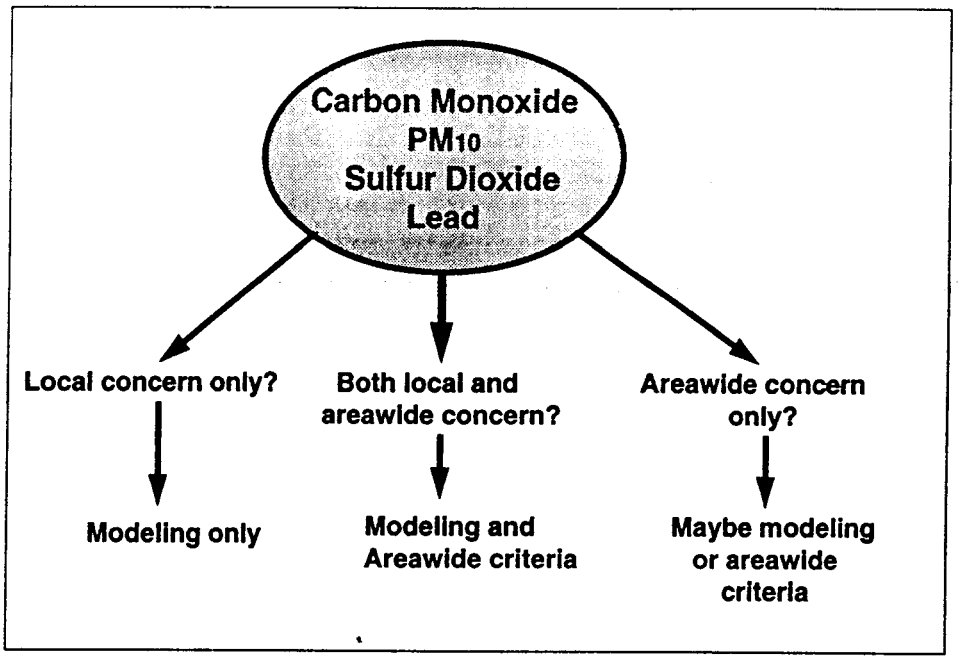
The rule of thumb is that anytime the regulatory agency deems the nonattainment situation as partially or entirely a local scale ("hotspot") problem, then a modeling demonstration will be required as part of the conformity determination. For example, if the regulatory agency says that a carbon monoxide nonattainment situation is both a local scale and areawide problem, the project proponent *must* conduct "hotspot" carbon monoxide modeling that demonstrates that the project-related carbon monoxide (CO) emissions, in conjunction with the background ("no-project") CO concentrations, will not result in a future exceedance of the CO NAAQS limiting standard. In this example, the project proponent must also show that the project-related CO emissions, on an areawide scale, satisfy one of EPA's "areawide" criteria (e.g., areawide modeling, offsets, or SIP CO budget allocation). If the regulatory agency deemed the CO nonattainment situation was only an areawide problem, the project proponent has the flexibility of using any of EPA's "areawide" criteria, which encompasses more options than the modeling criteria.

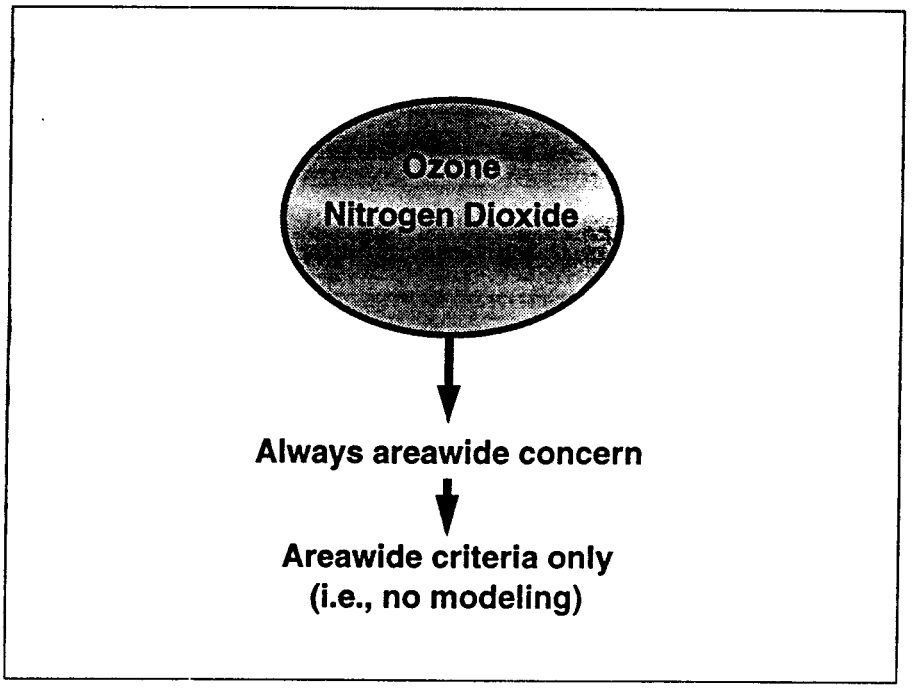
When faced with the situation of having to conduct modeling, it is crucial to use the appropriate background concentrations in arriving at the final modeling results. Appropriate background concentrations can be obtained from the local regulatory agency, but don't necessarily assume that this data is the most appropriate. Often, from traditional conservatism, the local regulatory agency will provide you the conservatively "worst" background concentrations for model data input. Often, the local regulatory agency doesn't understand that such conservatism dooms the conformity determination, which is purely a Federal requirement, from the beginning. The project proponent should ensure this concentration matches the relevant monitoring data available for the specific project area and accurately reflects the current, not necessarily the historic, background concentration. Often, the historic background concentration reflects the highest concentration recorded from monitoring stations during the time period the area was experiencing its worst readings. This often can be historic monitoring data that is nearly 10 years old. Current air quality background concentrations, based on most recent monitoring data, may reflect better air quality and less severe background concentrations. The project proponent must establish a favorable working relationship with the local regulatory agency to persuade the latter to accept a more "refined" approach in establishing the relevant background concentrations.

Another troublesome issue regarding modeling is the traditional conservatism displayed by some air quality modelers in selecting the metereological data (e.g., wind and temperature conditions) and operational assumptions that will be loaded into the model. Some air quality modelers, especially those working for the local regulatory agency, prefer loading worst case metereological conditions into the model. This is standard modeling

practice. Needless to say, this potentially results in inflated modeling results that show exacerbation of existing NAAQS violations or creation of new NAAQS violations. If the type of model allows use of more refined meteorological data, such as National Climatic Data Center (NCDC) data, then this data should be used if the initial model run using the conservative "worst case" meteorological data is unsuccessful. The more precise NCDC data represents hourly readings of actual meteorological conditions for an extended period of time (e.g., five years) in the applicable geographical area. Keep in mind that using models in the "refined" mode can be more costly, so it is recommended to initially run the model in a "screened" mode using the conservative assumptions to see if the modeling criteria can be inexpensively satisfied. Ensure project-related operational assumptions (e.g., number of aircraft landings and takeoffs per hour, maximum number of aircraft queuing for takeoff at any given time, or number of acres of land under construction at any given time) used for modeling aren't absurd or unrealistic. Some of the past conservative analytical approaches used for NEPA analysis (where the analytical result didn't stop a project) must be changed to reflect a more precise approach demanded by conformity (which commands that the project cannot proceed unless the analytical result shows positive conformity).

Another modeling issue that should be addressed is the placement of receptors for the model runs. Models allow hypothetical placement of receptors to measure pollutant concentrations at various locations. Some models can determine the maximum concentration hotspot anywhere on the installation resulting from the proposed project. Ensure the placement of receptors are based on sound, logical reasoning. For example, placement of a receptor several hundred yards downwind of where the aircraft takeoff will often result in the highest pollutant concentrations. However, that receptor location may be in an open, vacant airfield area where it is not reasonable to assume any type of threat to human health would result from that hotspot concentration. The more logical placement of receptors within the installation would be locations accessed by members of the public (e.g., schools, hospitals, shopping facilities, dormitories, etc.). Again, this issue should be coordinated with the local regulatory agency.


Carbon Monoxide
PM10
Sulfur Dioxide
Lead
Local concern only?
Modeling only
Both local and areawide concern?
Modeling and Areawide criteria
Areawide concern only?
Maybe modeling or areawide criteria


Ozone
Nitrogen Dioxide
Always areawide concern
Areawide criteria only
(i.e., no modeling)

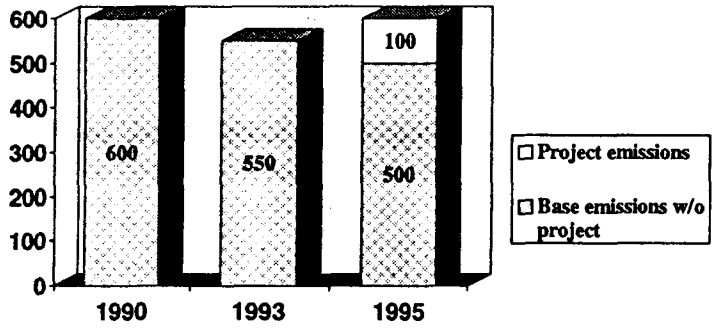
4.2.1.5 Historic Baseline Comparison

This "air quality" criteria can only be used if there is no post-1990 SIP emissions budget or inventory that has been approved by EPA. Without an EPA-approved SIP emission budget, the options available to project proponents to satisfy the "air quality" criteria would be severely limited, so EPA allowed the use of a historic baseline comparison method in that situation. The historic baseline comparison criteria allows a project proponent to compare the aggregate historic (no-project) emissions for a discrete facility under the proponent's control (e.g., Air Force installation) against the future emissions of the same facility with the proposed project. If the facility's future emission levels (with project) are equal to or less than the facility's historic baseline emission levels (without project), the project fulfills EPA's "air quality" conformity criteria (unless hotspot modeling is also required, as explained above).

A facility's historic baseline emissions are calculated based on the activity levels occurring on the facility in the applicable baseline year. The baseline year is normally the year 1990 or, if the air quality area is designated nonattainment after 1990, the year when the air quality area is designated nonattainment. EPA selected the year 1990 as the normal baseline year because 1990 is the baseline year used for SIP emission inventory planning by the states (unless the area is designated nonattainment after 1990). If the project proponent believes that the year 1990 was not a "representative" year reflecting the facility's historic activity levels, the project proponent can try to use an alternate baseline year. The alternate baseline year should be one of the years used by EPA to derive a "design value" for the air quality region to determine the region's nonattainment status. The "design value" years used by EPA for ozone were 1987-1989; for carbon monoxide, 1988-1989. In selecting an alternate baseline year from that range, the project proponent should select the most representative year of historic activity levels for the facility. This can be done by calculating the facility's historic emission levels for each of the "design value" years, averaging them, and then selecting the year of emissions that is closest to the average. An example of why a project proponent may want to pursue an alternate baseline year is that historic military aircraft activity levels during 1990 may have been diminished due to deployment of the facility's aircraft to another region during preparation for Desert Storm/Desert Shield. 1990 would be an aberrant year that establishes a smaller historic baseline year of emissions. The year 1988 or 1989 may be more representative of the facility's historic military aircraft activity levels.

This approach allows positive conformity for pursuing a new project at a facility with high historic activity levels and an intervening period of declining activity. The following chart represents a situation using the historic baseline comparison method to show positive conformity.

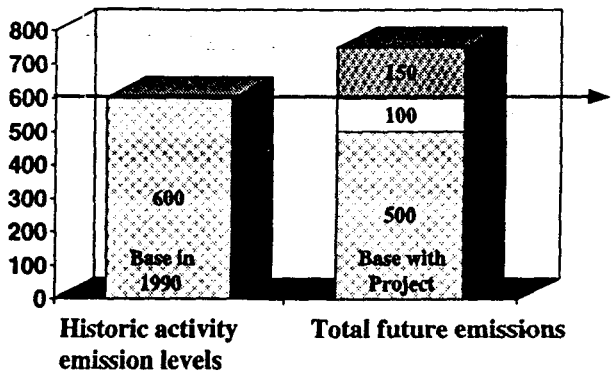
Historic Baseline Comparison



Hypo Air Force Base activity levels and emissions declining from 1990 levels which allow new 100 ton/yr project without the base exceeding its 1990 emissions level

Even if the facility's future year emission level exceeds the historic baseline level, the comparison approach can reduce or "shave off" some of the nonconforming emission levels. For example, assume a facility's 1990 historic activity level emissions of nitrogen oxide (NO_x) total 600 tons/year. During the intervening years leading up to a proposed project in 1995, the facility's activity level of NO_x emissions equal 500 tons/year. With the addition of a proposed project expected to emit 250 tons/year of NOx, the facility's activity level of NO_x emissions will go to 750 tons/year. Using the historic baseline comparison approach, the facility will be 150 tons/year above the historic baseline (or conforming) level. Without using the historic baseline comparison approach, the nonconforming level would be 250 tons/year. The following chart reflects this scenario.

Historic Baseline Comparison to Trim Nonconformance



To use the historic baseline comparison approach, EPA imposes some other restrictions. Calculation of the historic baseline emission level and the facility's future year emission level must be based on the same emission factors for the activity levels. For example, the fleet mix of motor vehicles used in 1990 were "dirtier" than the fleet mix of motor vehicles to be used in 1995 or future years. Emission factors for the 1990 motor vehicle fleet mix when compared to the cleaner emission factors for the motor vehicle fleet mix in 1995 and beyond would naturally result in a decreased amount of emissions from automobiles in the future, but not as a result of decreased usage but due to cleaner technology mandated by the Clean Air Act. EPA's rule disallows using this change in emission factors for the project proponent's benefit in using the historic baseline comparison approach. EPA's rule requires use of the same emission factors for the 1990 activity levels and the future year activity levels, unless the emission factors were not mandated by the Clean Air Act or CAA-mandated regulations (e.g., switching from KC-135E aircraft to KC-135R aircraft, which is cleaner than the KC-135E). If the future year activity (not emission) levels decrease from 1990 activity levels, the decrease in emissions associated with the decrease in activity levels can be used to the project proponent's benefit.

Past problems encountered using the historic baseline comparison approach include difficulties in reconstructing historic baseline activity levels. Many times, imprecise or no records of historic baseline activity levels were kept. Even if some records were retained, the considerable amount of effort to calculate a facility's historic baseline emission levels is time consuming and costly. Air Force installations currently engaged in a CAA Title V emission inventory by consultants are strongly encouraged to have the consultants record

historic activity levels in the event this data may be needed in the future for a conformity determination. Once these historic activity levels are recorded, the installation should maintain a program to update the activity levels (e.g., record decreases in POL usage or military aircraft flight activity).

4.2.2 "Emissions-related" Conformity Criteria (§ 93.158(c))

A project can be shown to satisfy the "emissions-related criteria" by demonstrating that the total emissions from the action comply or are consistent with all relevant requirements and milestones contained in the SIP. Relevant requirements and milestones may include SIP "reasonable further progress" schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements. Although SIPs may contain some requirements pertaining to mobile sources (e.g., inspection & maintenance plan or employee trip reduction plans), the majority of the requirements in a SIP concern stationary and area sources. Federal agencies are already required by the Clean Air Act to ensure those portions of a project subject to regulation as stationary or area sources (that are not already exempt from conformity due to NSR/PSD permitting procedures) satisfy local SIP requirements for those type of sources.

"Milestones" are percentage reductions in emissions within a certain time period as mandated by the Clean Air Act Amendments of 1990 (CAAA), depending on the type and severity of nonattainment. An example of a "milestone" is the requirement that areas that are moderate or worse nonattainment for ozone must provide for reasonable further progress (RFP) towards attainment through a 15% reduction in VOC emissions within six years of enactment of the 1990 CAAA. Thus, the first milestone year is 1996. CAA § 182(f) provides that all requirements for major sources of VOCs also apply to major sources of NO_x. However, reductions in NO_x need not be shown if EPA determines that they would not contribute to attainment. (CAA § 182(b)). Another example is the requirement that areas that are serious nonattainment for ozone must provide for RFP towards attainment through a 15% reduction similar to moderate nonattainment areas, plus a further 3% annual reduction in subsequent years until attainment is achieved by the attainment deadline of 1999. Thus, the first milestone year is 1996 and each subsequent emissions inventory year serves as an additional milestone until attainment is achieved. If the Federal project can achieve similar reduction rates of pollutant emissions, the project would not appear to delay the regulatory agency's efforts to satisfy interim or final milestones. However, the SIP, in a macro effort to focus more on sources that are more susceptible to regulatory efforts than others, may provide for less or more strenuous emission reductions for the type of sources involved in the Federal project. The Federal agency should review the SIP milestones and emission allocations for the various types of sources to ensure the conformity analysis doesn't overestimate or underestimate the conformity of the project's emissions to the SIP.

4.3 Other Restrictions (§ 93.159)

This section lists additional constraints on the Federal agency's analytical approach to determining conformity. These analytical constraints include the following:

a. Any planning assumptions must be based on the most recently MPO-approved estimates of population, employment, travel, and congestion.[2]

b. Any revisions to these estimates that are used by the Federal agency must be approved by the MPO.

c. The latest and most accurate emission estimation techniques (AP-42 emission factors and EPA-approved modeling) must be used.

(1) For modeling motor vehicle emissions, the most current version specified by EPA and available for use in the preparation or revision of SIPs in that state must be used.

(2) For non-motor vehicle sources, the latest emission factors specified by EPA in the "Compilation of Air Pollutant Emission Factors (AP-42)" must be used unless more accurate emission data is available.

(3) Any deviation from the above requires the approval of the applicable EPA Regional Administrator.

d. Except for determinations based on specific accountability of the project in the SIP's emission budget, the conformity analysis must reflect emission scenarios that are expected to occur under each of the following cases:

(1) The CAA-mandated attainment year or, if in a maintenance area, the farthest year for which emissions are projected in the state's maintenance plan.

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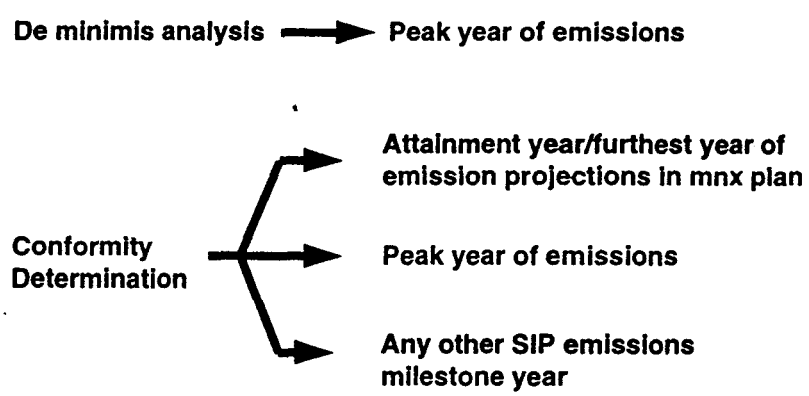
[2] The most recently MPO-approved planning estimates must be used even though those estimates may not have been used in the area's most recent EPA-approved SIP. This may result in a situation where the Federal agency is using a SIP approved by EPA sometime in the past (e.g., 1979) but the most recently MPO-approved planning estimates for future population and congestion growth were published in the 1990's. This dichotomy results from the specific statutory language in CAA § 176(c) which requires conformity with an approved SIP but also requires use of the most recent MPO planning estimates for population growth, employment, traffic, traffic congestion, etc.

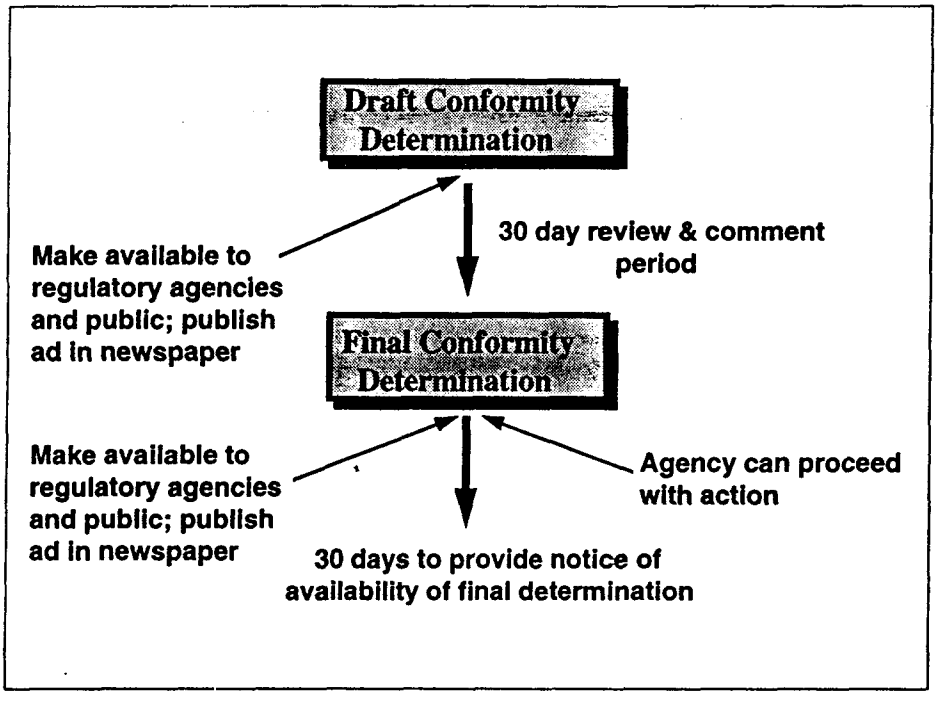
(2) The year when the total project emissions are projected to be the greatest on an annual basis (peak year of emissions).

(3) Any year for which the applicable SIP specifies an emissions budget.

Which Year of Emissions to Calculate
(Section 93.158(d))



4.4 Public Participation Requirements for Conformity Determinations (§ 93.155 and § 93.156)



4.4.1 Draft Conformity Determinations

After a Federal agency makes a draft conformity determination (not an applicability analysis), the agency must publish a notice of availability of the draft determination by prominently advertising the notice in a daily newspaper of general circulation in the area affected by the action. The agency must allow the public 30 days to provide written public comment prior to taking any formal action on the draft determination. The comment period can be concurrent with any NEPA public involvement process. Upon request by any person, the Federal agency must make the draft determination, along with supporting documentation describing analytical methods and conclusions, available for review. EPA's rule does not require that each requesting member of the public receive a copy of the documentation. Mailing lists and automatic distribution for "standing" requests are specifically not required. The Federal agency should consider distributing copies of the documentation to local libraries in the affected area to allow ample opportunity for public review.

4.4.2 Final Conformity Determination

The Federal agency must document its response to comments received on the draft determination and make the comments and responses available for review upon request by any person within 30 days after the final conformity determination. The Federal agency must also publish a notice of availability of the final determination in a manner similar to publication of the draft determination described above within 30 days after the final determination. *The Federal agency does not have to wait 30 days for public review or comment prior to proceeding with the action after it makes a final conformity determination.*

4.5 EPA and State Review Roles (§ 93.156)

The Federal agency must provide a 30-day notice describing the proposed action and the Federal agency's draft conformity determination to the appropriate EPA Regional Office (could be more than one if emissions affect an area encompassing more than one EPA Region), state and local air quality agencies. The 30-day notice and review period must also be provided to affected Federal land managers (e.g., National Park Service for potential visibility impacts on a nearby national park), MPO, and regional planning agency/agencies responsible for SIP planning if their programs are potentially affected by the proposed action. "Affected Federal land managers" include Class I areas (as defined in Section 162 of the CAA) within 100 kilometers (or 62.5 miles) of the project. Within 30 days after completing a final conformity determination, the Federal agency must notify the same agencies. This involvement of regulators and other agencies is in addition to their involvement in the previously mentioned conformity analytical process, such as determining which type of modeling (areawide or local) should be used or whether the SIP emission budget can accommodate the project's emissions.

5.0 MITIGATIONS (§ 93.160)

Any measures intended to mitigate air quality impacts must be identified and the process for implementation (including an implementation schedule with explicit timelines) and enforcement of such measures must be described in the conformity determination. Prior to concluding conformity, a Federal agency relying on another agency to implement mitigation measures as a condition of conformity must obtain written commitments from the implementing agency. If the Federal project is licensing, permitting, or otherwise approving an action to be conducted by other parties, approval by the Federal agency must be conditioned (in the license, permit, or approval document) on the applicant meeting the mitigation measures described in the conformity determination. If future circumstances require modification of mitigation measures, the mitigation obligations can be modified so long as the new mitigation measures continue to support the conformity determination and the proposed modification undergoes the public participation requirements described in Section 4.4 above. After a state revises its SIP to incorporate its own conformity requirements and EPA approves the SIP revision, any mitigation measures committed to by the Federal agency or agreed to by other entities would be enforceable by EPA, the state, and also subject to citizen suit enforcement.

As a practical matter, a Federal agency should consider developing the proposed project with any necessary mitigation measures included in the project design or proposal. In this manner, the mitigation measures may reduce the project's emissions to de minimis levels, thus eliminating the need for a conformity determination.

6.0 CONCLUDING THOUGHTS

Conformity is unique in that it encompasses emissions from both mobile and stationary sources, including sources that have traditionally not been subject to EPA or state regulation. Conformity is not simply a procedural process such as provided by NEPA -- conformity is a substantive (i.e., "thou shalt not") standard that must be satisfied prior to approving or implementing a Federal project. Failure to perform an adequate conformity analysis can be the "show stopper" for a Federal project facing potential litigation. Compliance with the general conformity requirements will prove to be challenging and require considerable strategizing prior to project design, approval, and implementation. As with the NEPA planning process, conformity should be part and parcel of the agency's development of the project proposal. Careful incorporation of emissions-reduction design features or process changes into the project proposal may lead to an exemption from the conformity requirements under the de minimis tests. Even if a conformity determination is required, innovative strategies and analytical methods can help minimize time delays and costs of complying with the conformity requirements. Use of private consultants to conduct conformity analyses requires a knowledgeable Federal project manager who can provide practical guidance to consultants on this newly emerging analytical area.

APPENDIX __

PRIMER - AIR QUALITY (Criteria Pollutants)

I. Criteria pollutants

A. Clean Air Act (CAA) Section 108(a)(1) describes the standards EPA must follow to list an air pollutant as a pollutant that is subject to a national ambient air quality standard (NAAQS) (otherwise known as "criteria" pollutant).

- "Criteria" pollutants are generally widespread and present in the ambient air (external to buildings and where the general public could be exposed) in all areas of the nation

- To be a "criteria" pollutant, must be:

  - an "air pollutant" as defined in Section 302(g),

  - emitted from *numerous or diverse* mobile or stationary sources, and

  - emissions of the pollutant from such sources cause or contribute to air pollution that may endanger public health or welfare

- Many air pollutants may qualify as hazardous air pollutants (HAPs) but not qualify as "criteria" pollutants because their sources aren't widespread enough to pose a nationwide public danger

B. The six criteria pollutants for which national ambient air quality standards have been published are:

1. Ozone (O_3), tropospheric or "ground level" version that is not to be confused with stratospheric ozone which is desirable

   - Ozone is formed by photochemical reactions involving two primary precursors (volatile organic compounds and nitrogen oxide)

   - To regulate ozone formation, regulatory agencies and the CAA regulate volatile organic compounds (VOCs) and nitrogen oxide (NO_x) as precursors, even though VOCs and NO_x are not "criteria" pollutants

2. Carbon monoxide (CO)

3. Particulate matter (PM_{10}), with an aerodynamic diameter equal to or less than 10 micrometers (or microns)

   - Some jurisdictions regulate other pollutants as precursors to PM_{10}, such as sulfur oxides

   - The CAA and EPA used to regulate total suspended particulate matter (TSP) but have since switched the legal and regulatory focus to PM_{10}

4. Nitrogen dioxide (NO_2), which is a subset of NO_x but separately qualifies as a criteria pollutant

5. Sulfur dioxide (SO_2)

6. Lead (Pb)

C. Air Quality Control Regions

- Based on commonality of terrain, political, and meteorological factors, EPA geographically divided the U.S. into "air quality control regions" that should be treated as a unit (or "area") for setting and implementing air quality standards

- Resulted in over 240 areas, each of which is designated as nonattainment, attainment, or unclassifiable for national air quality standards for *each* criteria pollutants (discussed below)

- An area could be "good" or attainment for one criteria pollutant but "bad" or nonattainment for other criteria pollutants

D. National Ambient Air Quality Standard (NAAQS)

- NAAQS establish the maximum permissible concentration of a criteria pollutant in the ambient air

- Two kinds of NAAQS: primary and secondary

  -- Primary NAAQS: maximum permissible concentrations to protect the public *health*

-- Secondary NAAQS: maximum permissible concentrations to protect the public *welfare* from known or anticipated adverse effects

- For the six criteria pollutants, there is no difference between the primary and secondary NAAQS, except for SO_2 which has an additional secondary standard

II. Universe of Regulated Sources

A. The three general categories of sources emitting air pollutants are:

- stationary sources
- area sources
- mobile sources

B. Stationary sources

- Any source other than an internal combustion engine used for transportation purposes or from a nonroad engine or vehicle

- Stationary sources are usually discrete, non-mobile sources within a single or small concentrated geographic location, such as a industrial furnace stack

C. Area sources

- Area sources are minor diffuse sources within a geographical area (e.g., residential housing area or parking lot of automobiles) that, in the aggregate, can result in substantial amounts of air pollutant emissions

D. Mobile sources

- Although not defined in the CAA, the term "mobile sources" usually refers to motor vehicles (e.g., automobiles), nonroad engines, and nonroad vehicles (e.g., construction equipment or locomotives) addressed in Title II of the CAA

- "Nonroad vehicles" means a vehicle powered by an internal combustion engine not used in a motor vehicle or in a competition (race car) vehicle

-- Nonroad engines can include lawnmowers, portable generators, and aerospace ground equipment

III. Nonattainment

- Requirements to combat an area's nonattainment of NAAQS for criteria pollutants are generally contained in the SIP applicable to the area

A. Nonattainment status

- Every state is divided into "areas" where each area is classified as attainment of the NAAQS, nonattainment, or unclassifiable for each criteria pollutant

  -- You could have an area that is nonattainment for two criteria pollutants and attainment for the remainder, thus subjecting the area to comply with PSD for the attainment pollutants and comply with nonattainment requirements for the nonattainment pollutants

  -- "Unclassifiable" means more data is necessary to formally determine whether the area is attainment or nonattainment, and during the interim, the area is treated as "attainment" for regulatory purposes

  -- Many areas that were classified as nonattainment for total suspended particulates (TSP) under the pre-1990 requirements are classified, by law, as moderate nonattainment for PM_{10} by operation of law in Section 107(d)(4) of the CAA, as amended in 1990

- Due to Congressional realization of its earlier overly ambitious goal that all states would be attainment of all NAAQS by 1987 and dissatisfaction with slow progress towards attainment, the 1990 CAA amendments drastically altered attainment deadlines and the necessary requirements for nonattainment areas to reach attainment

  -- Congress was particularly concerned with ozone, carbon monoxide, and particulate matter, and so Congress refined the process to designate the nonattainment status for those three pollutants

    --- Using EPA's "design value" concept, ozone nonattainment areas were broken down into six categories reflecting the degree of severity of nonattainment (marginal, moderate, serious, severe-15, severe-17, and extreme ozone nonattainment)

---- "Design values" are standardized measurements of air quality for a specified criteria pollutant, based on pre-1990 monitoring data, in an affected area (e.g., the fourth highest ozone concentration level reading in an area during the three-year period of 1987-1989)

--- Particulate matter and carbon monoxide nonattainment areas were categorized as either moderate or serious

-- Attainment deadlines for the various categories of nonattainment varied, depending on the severity of nonattainment

-- Stringency of emission reduction requirements and definition of "major source" depends on the category of nonattainment applicable to a given area

-- Congress required SIPs demonstrate or otherwise reflect different levels of planning, demonstration, and regulatory requirements depending on the severity of nonattainment

-- The following charts briefly describe the different categories of nonattainment for ozone, carbon monoxide, and PM_{10} and the differences in defining "major stationary source" and other regulatory requirements in those categories

SIP Requirements for Ozone Nonattainment Areas						
Category	**Major Source (TPY)**	**De Minimis (TPY)**	**Minimum Offsets**	**Vehicle I/M**	**Attainment Deadline**	**Reasonable Further Progress (RFP)**
Marginal	100	40	1.1 to 1	if already required	3 years	none
Moderate	100	40	1.15 to 1	Yes	6 years	15% in 6 years
Serious	50	25	1.2 to 1	Yes	9 years	15% in 6 years 3% per year thereafter
Severe-15	25	25	1.3 to 1 or 1.2 to 1 + BACT	Yes	15 years	15% in 6 years 3% per year thereafter

Severe-17	25	25	1.3 to 1 or 1.2 to 1 + BACT	Yes	17 years	15% in 6 years 3% per year thereafter
Extreme	10	0	1.5 to 1 or 1.2 to 1 + BACT	Yes	20 years	15% in 6 years 3% per year thereafter
Ozone Transport Region	50	40	1 to 1	Yes	Depends on severity	Depends on severity

SIP Requirements for Carbon Monoxide Nonattainment Areas						
Category	**Major Source (TPY)**	**Transport. Control Measures**	**Oxygenated Fuels**	**I/M**	**Attainment Deadline**	**VMT Forecast**
Moderate (design value ≤ 12.7 ppm)	100	Contingency	No	If already req'd	Dec 31, 1995	No
Moderate (design value > 12.7 ppm)	100	Contingency	No	enhanced	Dec 31, 1995	Yes
Serious	50	Yes	Yes	enhanced	Dec 31, 2000	Yes

SIP Requirements for Particulate Matter Nonattainment Areas					
Category	**Major Source (TPY)**	**RACT for Existing Major Sources**	**BACT for New Major Sources**	**Attainment Deadline**	**RFP**
Moderate	100	Yes	No	Dec 31, 1994	reductions every 3 years
Serious	70	Yes	Yes	Dec 31, 2001	reductions every 3 years

-- Section 175A provides that once EPA approves a redesignation request from a state to redesignate a nonattainment area to attainment, the affected area is designated "maintenance" and must comply with a long term SIP plan (initially for a 10 year period with a subsequent 10 year plan submitted at the eighth year of the initial 10 year period) with adequate regulatory requirements to maintain the NAAQS for specified criteria pollutant

B. General SIP Requirements for Nonattainment Areas

- An area designated as nonattainment must generally revise its SIP to provide for the following:

  · Inventory of actual emissions for all sources in the area

  · Adoption of all reasonably available control measures, including RACT for existing major sources

  · Provisions to ensure reasonable further progress (RFP) toward attainment

  · Permit program for new sources and modifications pursuant to Section 173 of the CAA

  · Identification and quantification of emissions allowable per Section 173(a)(1)(B) from the construction and modification of major stationary sources

  · Any other measures necessary to ensure attainment, including contingency measures that will take effect in the event the area fails to meet either its targets for RFP or the attainment deadline

C. Emission Inventory Requirements for Nonattainment Areas (assume nonattainment as of 15 Nov 90)

- Ozone Nonattainment

  · Moderate Nonattainment Areas

    -- 1990 Actual Emissions Inventory (baseline) (due 15 Nov 92)

- RFP for VOC reductions of at least 15% from baseline by 11/15/96 (due 15 Nov 93)

- Attainment demonstration (if EKMA model used, due 15 Nov 93; if photochemical model used, due 15 Nov 94)

- Triennial update to Emissions Inventory, including demonstration of consistency between projected and actual emissions and vehicle-miles-travelled (VMT) data (due 31 Dec 95)

- Reach Attainment (15 Nov 96)

Serious Nonattainment Areas

- 1990 Actual Emissions Inventory (baseline)(due 15 Nov 92)

- RFP for VOC reductions of at least 15% from baseline by 11/15/96 (due 15 Nov 93)

- Attainment demonstration, including RFP demonstration to show 3% per year average reduction for 3 years from 1996 until attainment (due 15 Nov 94)

- VMT forecasts (due 15 Nov 94)

- Triennial update to Emissions Inventory (due 31 Dec 95)

- Reach Attainment (15 Nov 99)

Severe Nonattainment Areas

- 1990 Actual Emissions Inventory (baseline)(due 15 Nov 92)

- RFP for VOC reductions of at least 15% from baseline by 11/15/96 (due 15 Nov 93)

- Attainment demonstration, including RFP demonstration to show 3% per year average reduction for 3 years from 1996 until attainment (due 15 Nov 94)

- VMT forecasts (due 15 Nov 94)

- Triennial update to Emissions Inventory (due 31 Dec 95)

-- Reach Attainment (Severe-15, by 15 Nov 2005; Severe-17, by 15 Nov 2007)

Extreme Nonattainment Areas

-- Same as for Severe Nonattainment Areas, except for nonattainment deadline and plus the following:

--- First compliance demonstration on emission milestones (due 15 Feb 97)

--- Reach Attainment (15 Nov 2010)

- Carbon Monoxide Nonattainment

Moderate Nonattainment and Design Value $\leq$ 12.7 ppm

-- 1990 Actual Emissions Inventory (due 15 Nov 92)

-- Contingency provisions (due 15 Nov 93)

-- Reach Attainment (31 Dec 95)

Moderate Nonattainment and Design Value $\geq$ 12.7 ppm

-- Attainment demonstration with annual reductions, to include VMT forecast and contingency provision (due 15 Nov 92)

-- Reach Attainment (31 Dec 95)

Serious Nonattainment

-- Attainment demonstration with specific annual reductions, to include VMT forecast for each year before attainment and contingency provision if VMT estimate is exceeded (due 15 Nov 92)

-- Reach Attainment (31 Dec 2000)

- PM_{10} Nonattainment - Pending further EPA guidance

C. New Source Review and Emission Offsets

- Section 173 of the CAA imposes special review, permit, and offset requirements for new major stationary sources and major modifications to existing sources in nonattainment areas

  -- New major stationary sources and modifications must undergo a thorough "new source review" (NSR) that requires obtaining a permit to construct and a permit to operate the facility, use of the "lowest achievable emission rate" technology or work practice to minimize emissions, and obtaining emission offsets at certain ratios to compensate for any added emissions resulting from the project

- Emission offsets

  -- To permit a new major source or modification in a nonattainment area, the regulatory agency must find that the project will result in an overall net benefit (or reduction) in emissions of the nonattainment pollutant for the area consistent with RFP towards attainment

  -- New sources essentially assume the burden of accommodating new growth in a nonattainment area

  -- The overall benefit or reduction in emissions is achieved with the use of emission offsets to compensate for the added emissions expected to result from the project and to also compensate for any necessary % reduction consistent with the area's efforts to achieve attainment

  -- For ozone nonattainment areas, the CAA mandates higher offset ratios for areas that have a worse degree of nonattainment (can range from 1.1/1 to 1.5/1)

    --- For states that have failed to provide EPA with an adequate SIP required under the CAA, EPA must impose one or both of two sanctions, where one of the sanctions is a requirement for a 2:1 emission offset ratio for new sources

  -- How to obtain emission credits

    --- Voluntary reductions in emissions beyond the applicable SIP requirements, such as switching to cleaner fuels ahead of any SIP schedule or requirement

--- Reductions achieved by permanent shutdowns, curtailments, or reduced hours of operation below certain baseline levels

--- Purchase credits on open market if the local regulatory agency has established an emission credit market program

-- Any emission reduction efforts to generate offsets must be quantifiable, permanent, surplus to SIP requirements, and Federally enforceable

--- In many air districts in California, an emission offset credit equal to one ton/year of NO_x can cost $ 15,000 to $20,000 on the open market

--- Normally, offsets can be obtained only from other sources within the same air quality control area, even though EPA will allow obtaining offsets from an upwind air basin if EPA has formally determined that emissions in the upwind air basin contribute to the NAAQS violation of the downwind area where the offsets will be used and that the upwind air basin's nonattainment status for the applicable pollutant is equal or worse than the downwind air basin's status

ADMINISTRATIVE OFFICES, LEGAL &
WATER MANAGEMENT DIVISION
1900 - 9TH AVENUE
TAMPA, FLORIDA 33605
TELEPHONE (813)272-5960
FAX (813)272-5157

AIR MANAGEMENT DIVISION
TELEPHONE (813)272-5530

WASTE MANAGEMENT DIVISION
TELEPHONE (813)272-5788

ECOSYSTEMS MANAGEMENT DIVISION
TELEPHONE (813)272-7104

December 29, 1994

Mr. Bruce C. Drennan
Program Manager
Greater Tampa Chamber of Commerce
P.O. Box 420
Tampa, FL 33601-0420

Dear Mr. Drennan:

I received your letter of December 28, 1994, providing details related to the potential basing of a tanker wing at MacDill AFB. As we discussed at our meeting last week on this topic, the primary issue concerns the general conformity provisions applicable to federal actions, 40 CFR Parts 6, 51, and 93.

Hillsborough County is currently seeking redesignation as an ozone maintenance area. I see no reason why this request will not be approved by the US EPA. As a maintenance area, the general conformity regulation establishes a 100 tons per year significance level for emissions of the pollutants NOx and VOC. This means if the total of direct and indirect emissions for either of these pollutants is less that 100 tons per year, a general conformity determination is not required.

My staff has done a quick screening evaluation of the potential air quality impacts from this proposed activity, and have determined that the related emissions are expected to be well below these 100 tons per year thresholds. I can with reasonable assurance state that the proposed basing of this tanker wing at MacDill AFB will have no relevant impact on our air quality.

If you have any further questions on this matter, please feel free to contact me at (813) 272-5530.

Sincerely,

for Iwan Choroneko
Director
Air Management Division

cf:
Roger P. Stewart

Document Separator

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Date 3/16/95

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Coordination	Justify	

REMARKS

Deirdre,

This document won't be able to answer all of your specific questions, but it could be a start. Don't hesitate to call me if you have any other questions. (215) 597-0545).

Kathleen Henry

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United States
Environmental Protection
Agency

Air And Radiation
(ANR-443)

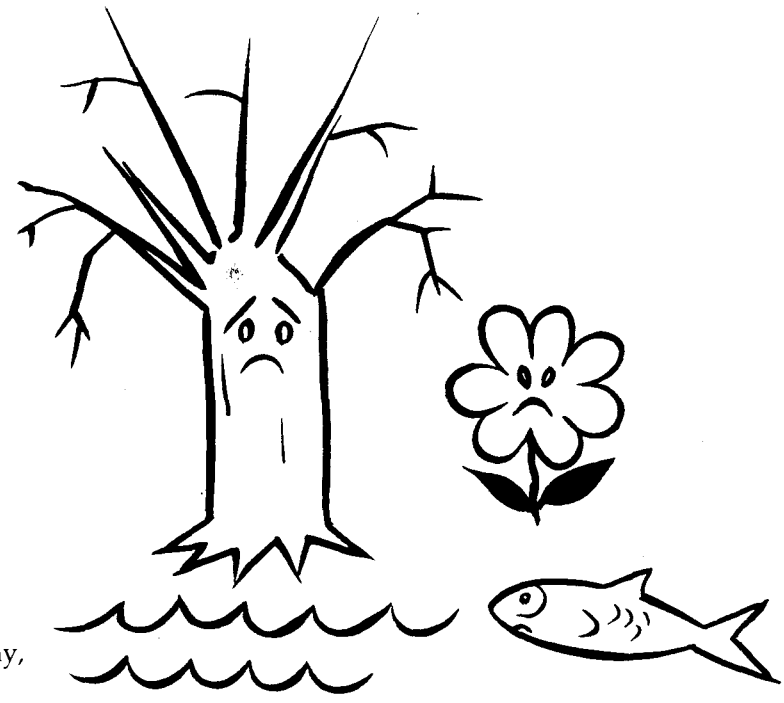
EPA 400-K-93-001
April 1993

EPA

The Plain English Guide To The Clean Air Act

The Clean Air Act: The promise of cleaner air for all Americans.

Why should you be concerned about air pollution?



Air pollution can make you sick. It can cause burning eyes and nose and an itchy, irritated throat, as well as trouble in breathing. Some chemicals found in polluted air cause cancer, birth defects, brain and nerve damage and long-term injury to the lungs and breathing passages. Some air pollutants are so dangerous that accidental releases can cause serious injury or even death.

Air pollution can damage the environment. Trees, lakes and animals have been harmed by air pollution. Air pollutants have thinned the protective ozone layer above the Earth; this loss of ozone could cause changes in the environment as well as more skin cancer and cataracts (eye damage) in people.

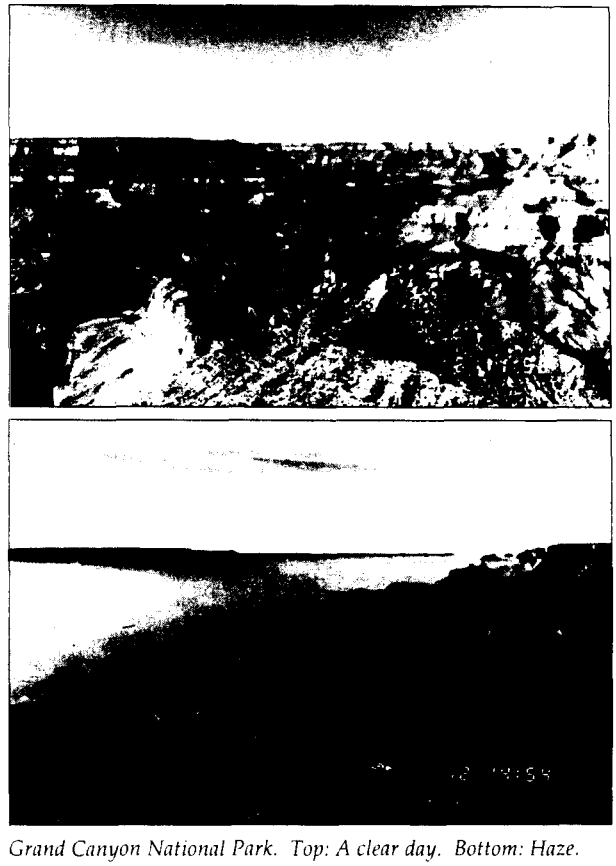
Air pollution can damage property. It can dirty buildings and other structures. Some common pollutants eat away stone, damaging buildings, monuments and statues.

Air pollution can cause haze, reducing visibility in national parks and sometimes interfering with aviation.

The Clean Air Act will improve air quality in the United States, a good thing for your health, your property and the environment. The 1990 Act[1] could change the way you work or do business, and it could, in some ways, change the way you live. The 1990 Clean Air Act is lengthy—about 800 pages—because it tackles many difficult and complicated air pollution problems.

We have prepared this summary of the 1990 version of the Clean Air Act because we think everyone should understand what is in the law and how it may affect them.

This summary is only a brief introduction to the 1990 Clean Air Act. If you want more information, please contact your regional office of the Environmental Protection Agency (EPA) or your state, city, regional or local air pollution control agency. You'll find a list of addresses and telephone numbers of EPA regional offices and state and other air pollution control agencies at the end of this summary.



Grand Canyon National Park. Top: A clear day. Bottom: Haze.

[1] The 1990 Clean Air Act is the most recent version of a law first passed in 1970. The 1990 ammendments made major changes in the Clean Air Act. This summary covers some of the important provisions of the 1990 Clean Air Act.

Features of the 1990 Clean Air Act

The role of the federal government and the role of the states

Although the 1990 Clean Air Act is a federal law covering the entire country, the states do much of the work to carry out the Act. For example, a state air pollution agency holds a hearing on a permit application by a power or chemical plant or fines a company for violating air pollution limits.

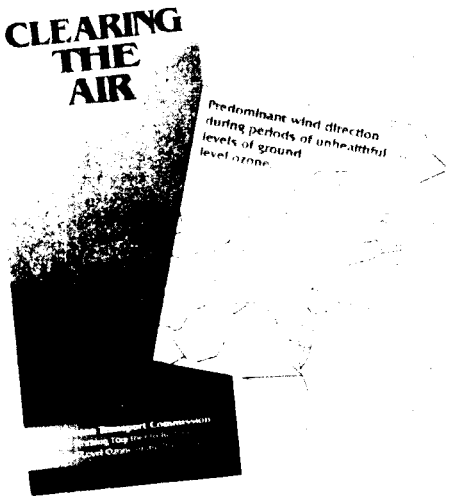
Under this law, EPA sets limits on how much of a pollutant can be in the air anywhere in the United States. This ensures that all Americans have the same basic health and environmental protections. The law allows individual states to have stronger pollution controls, but states are not allowed to have weaker pollution controls than those set for the whole country.

The law recognizes that it makes sense for states to take the lead in carrying out the Clean Air Act, because pollution control problems often require special understanding of local industries, geography, housing patterns, etc.

States have to develop **state implementation plans (SIPs)** that explain how each state will do its job under the Clean Air Act. A state implementation plan is a collection of the regulations a state will use to clean up polluted areas. The states must involve the public, through hearings and opportunities to comment, in the development of each state implementation plan.

EPA must approve each SIP, and if a SIP isn't acceptable, EPA can take over enforcing the Clean Air Act in that state.

The United States government, through EPA, assists the states by providing scientific research, expert studies, engineering designs and money to support clean air programs.



State governments from Maine to Virginia, the government of the District of Columbia, and the U.S. Environmental Protection Agency are working together through the Ozone Transport Commission to reduce smog on the East Coast.

Interstate air pollution

Air pollution often travels from its source in one state to another state. In many metropolitan areas, people live in one state and work or shop in another; air pollution from cars and trucks may spread throughout the interstate area. The 1990 Clean Air Act provides for interstate commissions on air pollution control, which are to develop regional strategies for cleaning up air pollution. The 1990 Clean Air Act includes other provisions to reduce interstate air pollution.

International air pollution

Air pollution moves across national borders. The 1990 law covers pollution that originates in Mexico and Canada and drifts into the United States and pollution from the United States that reaches Canada and Mexico.

Contents

The 1990 Clean Air Act includes novel approaches for dealing with pollution released by large sources such as big factories.

Permits

One of the major breakthroughs in the 1990 Clean Air Act is a **permit** program for larger **sources** that release pollutants into the air. [2]

Requiring polluters to apply for a permit is not a new idea. Approximately 35 states have had statewide permit programs for air pollution. The Clean Water Act requires permits to release pollutants into lakes, rivers or other waterways. Now air pollution is also going to be managed by a national permit system. Under the new program, permits are issued by states or, when a state fails to carry out the Clean Air Act satisfactorily, by EPA. The permit includes information on which pollutants are being released, how much may be released, and what kinds of steps the source's owner or operator is taking to reduce pollution, including plans to **monitor** (measure) the pollution. The permit system is especially useful for businesses covered by more than one part of the law, since information about all of a source's air pollution will now be in one place. The permit system simplifies and clarifies businesses' obligations for cleaning up air pollution and, over time, can reduce paperwork. For instance, an electric power plant may be covered by the acid rain, hazardous air pollutant and non-attainment (smog) parts of the Clean Air Act; the detailed information required by all these separate sections will be in one place—on the permit.

Permit applications and permits are available to the public; contact your state or regional air pollution control agency or EPA for information on access to these documents.

Businesses seeking permits have to pay **permit fees** much like car owners paying for car registrations. The money from the fees will help pay for state air pollution control activities.

[2] A source can be a power plant, factory or anything that releases pollutants into the air. Cars, trucks and other motor vehicles are sources, and consumer products and machines used in industry can be sources too. Sources that stay in one place are referred to as **stationary sources**; sources that move around, like cars or planes, are called **mobile sources**.

Enforcement

The 1990 Clean Air Act gives important new **enforcement** powers to EPA.

It used to be very difficult for EPA to penalize a company for violating the Clean Air Act. EPA had to go to court for even minor violations. The 1990 law enables EPA to fine violators, much like a police officer giving traffic tickets. Other parts of the 1990 law increase penalties for violating the Act and bring the Clean Air Act's enforcement powers in line with other environmental laws.

Deadlines

The 1990 Clean Air Act sets **deadlines** for EPA, states, local governments and businesses to reduce air pollution. The deadlines in the 1990 Clean Air Act were designed to be more realistic than deadlines in previous versions of the law, so it is more likely that these deadlines will be met.

Public participation

Public participation is a very important part of the 1990 Clean Air Act. Throughout the Act, the public is given opportunities to take part in determining how the law will be carried out. For instance, you can take part in hearings on the state and local plans for cleaning up air pollution. You can sue the government or a source's owner or operator to get action when EPA or your state has not enforced the Act. You can request action by the state or EPA against violators.

The reports required by the Act are public documents. A great deal of information will be collected on just how much pollution is being released; these **monitoring (measuring) data** will be available to the public. The 1990 Clean Air Act ordered EPA to set up **clearinghouses** to collect and give out technical information. Typically, these clearinghouses will serve the public as well as state and other air pollution control agencies.

See the list at the end of this summary for organizations to contact for additional information about air pollution and the Clean Air Act.

Market approaches for reducing air pollution; economic incentives

The 1990 Clean Air Act has many features designed to clean up air pollution as efficiently and inexpensively as possible, letting businesses make choices on the best way to reach pollution clean-up goals. These new flexible programs are called **market** or **market-based** approaches. For instance, the acid rain clean-up program offers businesses choices as to how they reach their pollution reduction goals and includes pollution allowances that can be traded, bought and sold.

The 1990 Clean Air Act provides **economic incentives** for cleaning up pollution. For instance, gasoline refiners can get **credits** if they produce cleaner gasoline than required, and they can use those credits when their gasoline doesn't quite meet clean-up requirements.

How Smog is Formed...

Next page: Many sources, including cars, factories, and products used in homes, release smog-forming pollutants. Wind blows the pollutants away from their sources and, while the pollutants are being blown along, they undergo chemical reactions. Heat and sunlight increase the reactions. These reactions form ground-level ozone, the principal component of smog.

Hours after the smog-forming pollutants were released from their sources, smog pollutes the air, often miles away from where the smog-forming pollutants were released.

Cleaning up air pollution: the programs in the 1990 Clean Air Act

Smog and other "criteria" air pollutants

A few common air pollutants are found all over the United States. These pollutants can injure health, harm the environment and cause property damage.

EPA calls these pollutants **criteria air pollutants** because the agency has regulated them by first developing health-based **criteria** (science-based guidelines) as the basis for setting permissible levels. One set of limits **(primary standard)** protects health; another set of limits **(secondary standard)** is intended to prevent environmental and property damage. A geographic area that meets or does better than the primary standard is called an **attainment area;** areas that don't meet the primary standard are called **nonattainment** areas.

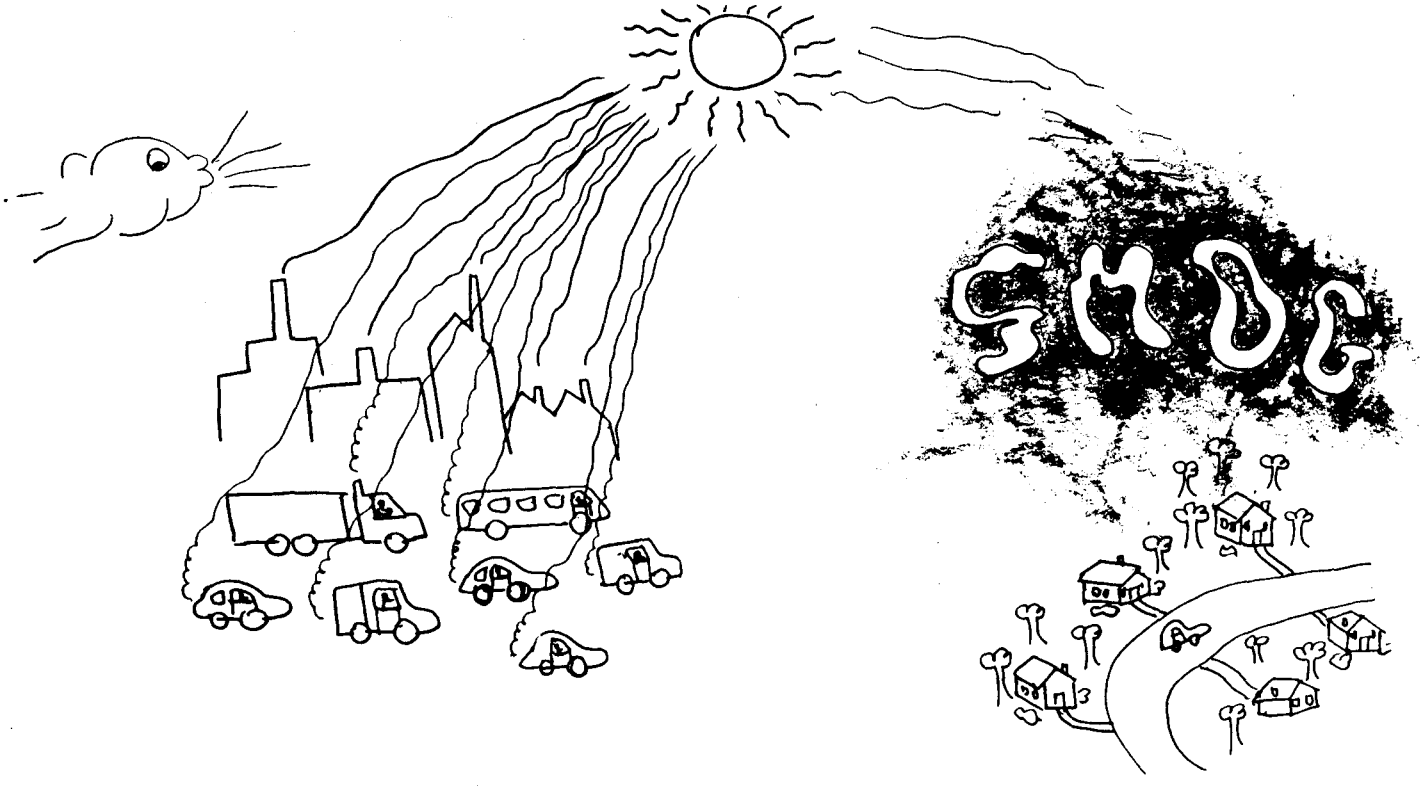
Although EPA has been regulating criteria air pollutants since the 1970 CAA was passed, many urban areas are classified as nonattainment for at least one criteria air pollutant. It has been estimated that about 90 million Americans live in nonattainment areas.

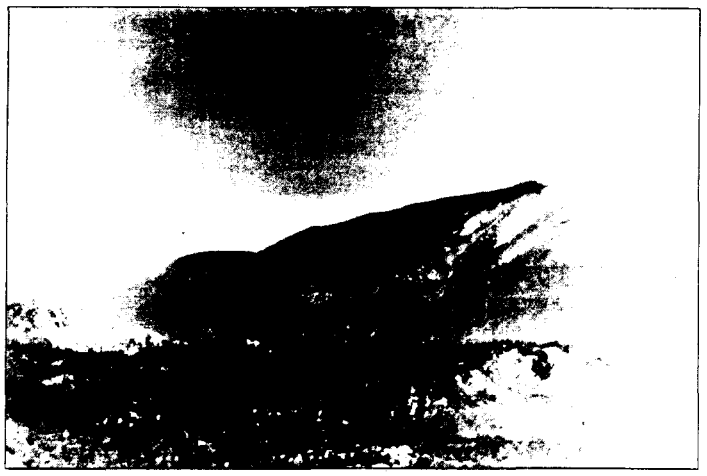
Smog

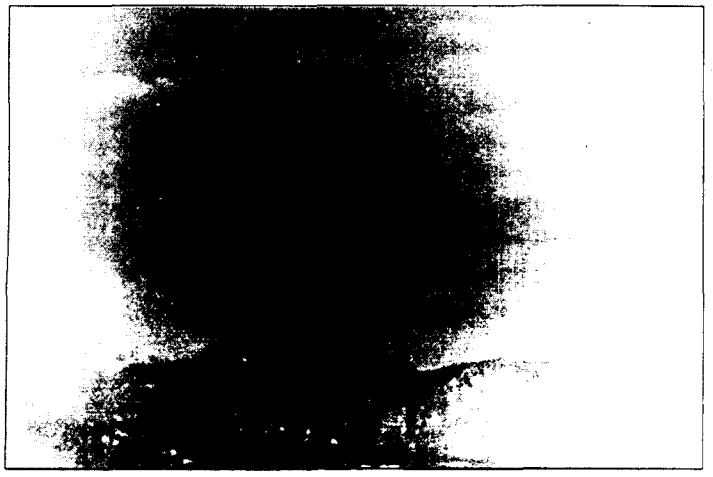
What we typically call **smog** is primarily made up of **ground-level ozone.** Ozone can be good or bad depending on where it is located. Ozone in the **stratosphere** high above the Earth protects human health and the environment, but ground-level ozone is the main harmful ingredient in smog.

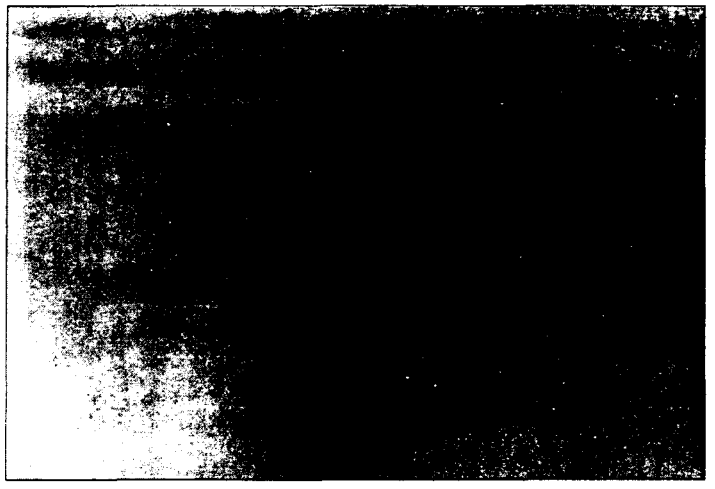
Ground-level ozone is produced by the combination of pollutants from many sources, including smokestacks, cars, paints and solvents. When a car burns gasoline, releasing exhaust fumes, or a painter paints a house, smog-forming pollutants rise into the sky.

Often, wind blows smog-forming pollutants away from their sources. The smog-forming reactions take place while the pollutants are being blown through the air by the wind. This explains why smog is often more severe miles away from the source of smog-forming pollutants than it is at the source.









Smog in the San Gorgonio Wilderness east of Los Angeles. All photos were taken at 3 p.m. Top: Good visibility. Center: Haze. Bottom: Intense haze.

The smog-forming pollutants literally cook in the sky, and if it's hot and sunny, smog forms more easily. Just as it takes time to bake a cake, it takes time to cook up smog—several hours from the time pollutants get into the air until the smog gets really bad.

Weather and geography determine where smog goes and how bad it is. When **temperature inversions** occur (warm air stays near the ground instead of rising) and winds are calm, smog may stay in place for days at a time. As traffic and other sources add more pollutants to the air, the smog gets worse.

Since smog travels across county and state lines, when a metropolitan area covers more than one state (for instance, the New York metropolitan area includes parts of New Jersey and Connecticut), their governments and air pollution control agencies must cooperate to solve their problem. Governments on the East Coast from Maine to Washington, D.C., will have to work together in a **multistate** effort to reduce the area's smog problem.

Here's how the 1990 Clean Air Act reduces pollution from criteria air pollutants, including smog.

First, EPA and state governors cooperated to **identify** nonattainment areas for each criteria air pollutant. Then, EPA **classified** the nonattainment areas according to how badly polluted the areas are. There are five classes of nonattainment areas for smog, ranging from **marginal** (relatively easy to clean up quickly) to **extreme** (will take a lot of work and a long time to clean up).

The 1990 Clean Air Act uses this new classification system to tailor clean-up requirements to the severity of the pollution and set realistic deadlines for reaching clean-up goals. If deadlines are missed, the law allows more time to clean up, but usually a nonattainment area that has missed a clean-up deadline will have to meet the stricter clean-up requirements set for more polluted areas.

Not only must nonattainment areas meet deadlines, states with nonattainment areas must show EPA that they are moving on clean-up before the deadline—making **reasonable further progress.**

States will usually do most of the planning for cleaning up criteria air pollutants, using the permit system to make sure power plants, factories and other pollution sources meet their clean-up goals.

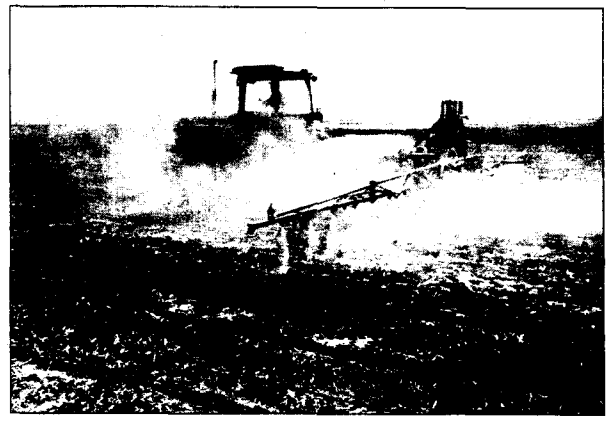
The comprehensive approach to reducing criteria air pollutants taken by the 1990 Act covers many different sources and a variety of clean-up methods. Many of the smog clean-up requirements involve motor vehicles (cars, trucks, buses). Also, as the pollution gets worse, pollution controls are required for smaller sources.

Other criteria pollutants: carbon monoxide and particulates

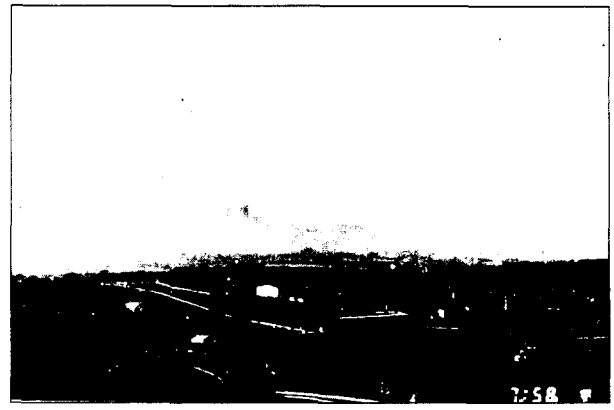
The carbon monoxide (CO) and particulate matter (PM-10) clean-up plans are set up like the plan for smog, but only two pollution classes are identified for each (instead of the five for ozone). Getting rid of **particulates** (soots, dusts, smoke) will require pollution controls on power plants and restrictions on smaller sources such as wood stoves, agricultural burning, and dust from fields and roads. Because so many homes have woodstoves and fireplaces, this summary of the Clean Air Act includes a section on **Woodstoves and fireplaces**, providing information on how the Clean Air Act will affect these home heating systems.

Offsets

What if a company wants to expand or change a production process or otherwise increase its output of a criteria air pollutant? If an owner or operator of a major source wants to release more of a criteria air pollutant, an **offset** (a reduction of the criteria air pollutant by an amount somewhat greater than the planned increase) must be obtained somewhere else, so that permit requirements are met and the nonattainment area keeps moving toward attainment. The company must also install tight pollution controls. An increase in a criteria air pollutant can be offset with a reduction of the pollutant from some other stack at the same plant or at another plant owned by the same or some other company in the nonattainment area. Since total pollution will continue to go down, trading offsets among companies is allowed. This is one of the market approaches to cleaning up air pollution in the Clean Air Act.



Dusty farm operations, such as soil tillage and pesticide application, can pollute the air.



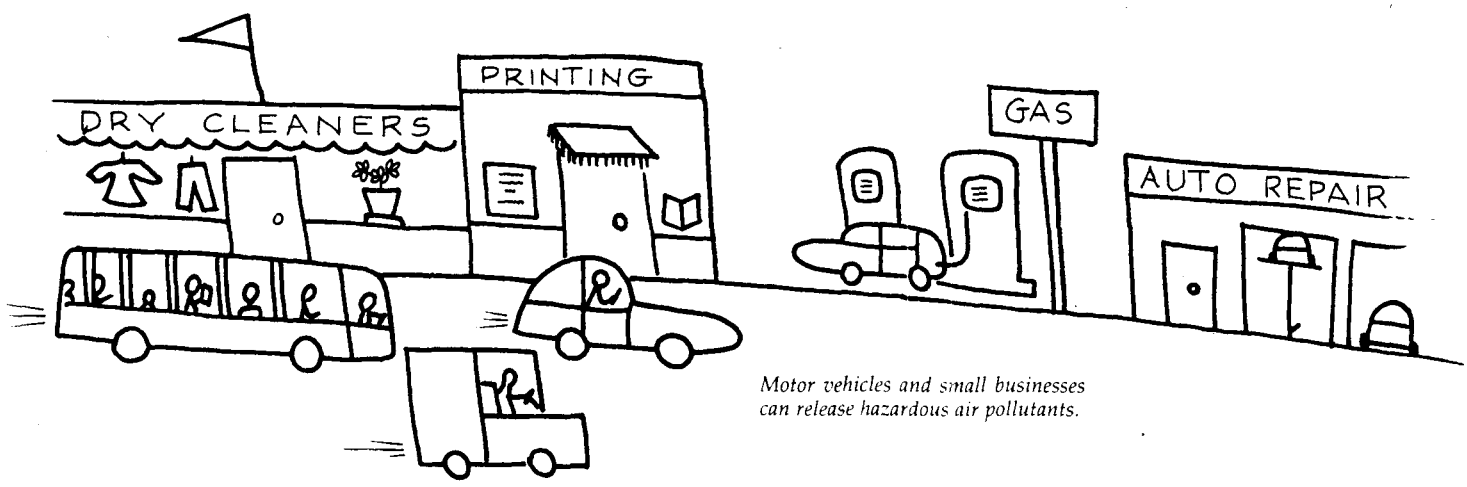
Air pollution in Denver, Colorado, sometimes causes hazy "brown cloud". Denver has also had problems with carbon monoxide pollution.

Criteria air pollutants in gasoline and consumer products

Volatile organic compounds (VOCs), important smog-forming chemicals, are found in gasoline and many consumer products, from hair spray to charcoal starter fluid to plastic popcorn packaging. This summary includes a section on **Consumer Products**; see that section for information on how the Clean Air Act will affect products you use every day. Information on changes in gasoline will be found in the section on **Mobile Sources**.

Hazardous air pollutants

Some air pollutants can cause cancer, problems with having children and other very serious illnesses as well as environmental damage. Air pollutants have killed people swiftly when large quantities were released; the 1984 release of methyl isocyanate at a pesticide-manufacturing plant in Bhopal, India, killed approximately 4,000 people and injured more than 200,000.

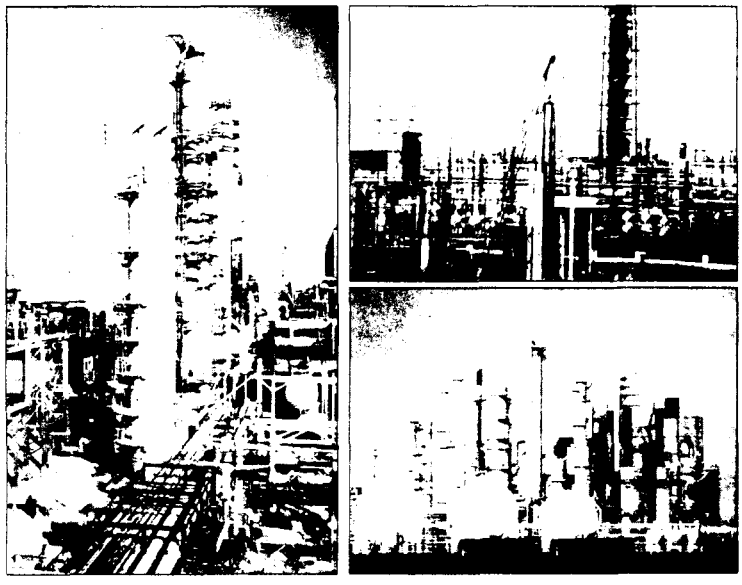


Motor vehicles and small businesses can release hazardous air pollutants.

EPA refers to chemicals that cause serious health and environmental hazards as **hazardous air pollutants (HAPs)** or **air toxics.**

Air toxics are released from sources throughout the country and from motor vehicles. For example, gasoline contains toxic chemicals. Gases escape from liquid gasoline and form a **vapor** in a process called **vaporization** or **evaporation.** When you put gas in your car, you can often see wavy lines in the air at the pump nozzle and you can smell gasoline; that tells you gasoline vapors are in the air.

When cars and trucks burn gasoline, air toxics come out of the tailpipes. (These air toxics are **combustion products**—chemicals that are produced when a substance is burned.)



Petrochemical plants can release hazardous air pollutants. A. A Texaco, Inc., plant at Port Neches, Texas, which manufactures a fuel additive; B. Construction at a Phillips Petroleum refinery in Sweeny, Texas (1985); C. The Texaco, Inc., refinery at Convent, Louisiana (1983).

Air toxics are released from small stationary sources, such as dry cleaners and auto paint shops. Large stationary sources, such as chemical factories and incinerators, also release hazardous air pollutants. The 1990 Clean Air Act deals more strictly with large sources than small ones, but EPA must regulate small sources of hazardous air pollutants as well.

To reduce air toxics pollution, EPA must first identify the toxic pollutants whose release should be reduced. The 1970 Clean Air Act gave EPA authority to list air toxics for regulation and then to regulate the chemicals. The agency listed and regulated seven chemicals through 1990. The 1990 Act includes a list of 189 hazardous air pollutants selected by Congress on the basis of potential health and/or environmental hazard; EPA must regulate these listed air toxics. The 1990 Act allows EPA to add new chemicals to the list as necessary.

To regulate hazardous air pollutants, EPA must identify **categories of sources** that release the 189 chemicals listed by Congress in the 1990 Clean Air Act. Categories could be gasoline service stations, electrical repair shops, coal-burning power plants, chemical plants, etc. The air toxics producers are to be identified as **major** (large) or **area** (small) sources.

Once the categories of sources are listed, EPA will issue regulations. In some cases, EPA may have to specify exactly how to reduce pollutant releases, but wherever possible companies will have flexibility to choose how they meet requirements. Sources are to use **Maximum Available Control Technology (MACT)** to reduce pollutant releases; this is a very high level of pollution control.

EPA must issue regulations for major sources first, and must then issue regulations to reduce pollution from small sources, setting priorities for which small sources to tackle first, based on health and environmental hazards, production volume, etc.

If a company wishes to increase the amount of air toxics coming out of an operating plant, the company may choose to **offset** the increases so that total hazardous air pollutant releases from the plant do not go up. Otherwise, they may choose to install pollution controls to keep pollutants at the required level.

If a company reduces its releases of a hazardous air pollutant by about 90 percent before EPA regulates the chemical, the company will get extra time to finish cleaning up the remaining 10 percent. This **early reduction** program is expected to result in a speedy reduction of the levels of several important hazardous air pollutants.

Under the 1990 Clean Air Act, EPA is required to study whether and how to reduce hazardous air pollutants from small neighborhood polluters such as auto paint shops, print shops, etc. The agency will also have to look at air toxics pollution after the first round of regulations to see whether the remaining health hazards require further regulatory action.

Cars, trucks, buses and other mobile sources release large amounts of hazardous air pollutants like formaldehyde and benzene. Cleaner fuels and engines and making sure that pollution control devices work should reduce hazardous air pollutants from mobile sources.

The Bhopal tragedy inspired the 1990 Clean Air Act requirement that factories and other businesses develop plans to prevent **accidental releases** of highly toxic chemicals. The Act establishes the **Chemical Safety Board** to investigate and report on accidental releases of hazardous air pollutants from industrial plants. The Chemical Safety Board will operate like the National Transportation Safety Board (NTSB), which investigates plane and train crashes.

Mobile sources
(cars, trucks, buses, off-road vehicles, planes, etc.)

ach of today's cars produces 60 to 80 percent less pollution than cars in the 1960s. More people are using mass transit. Leaded gas is being phased out, resulting in dramatic declines in air levels of lead, a very toxic chemical.

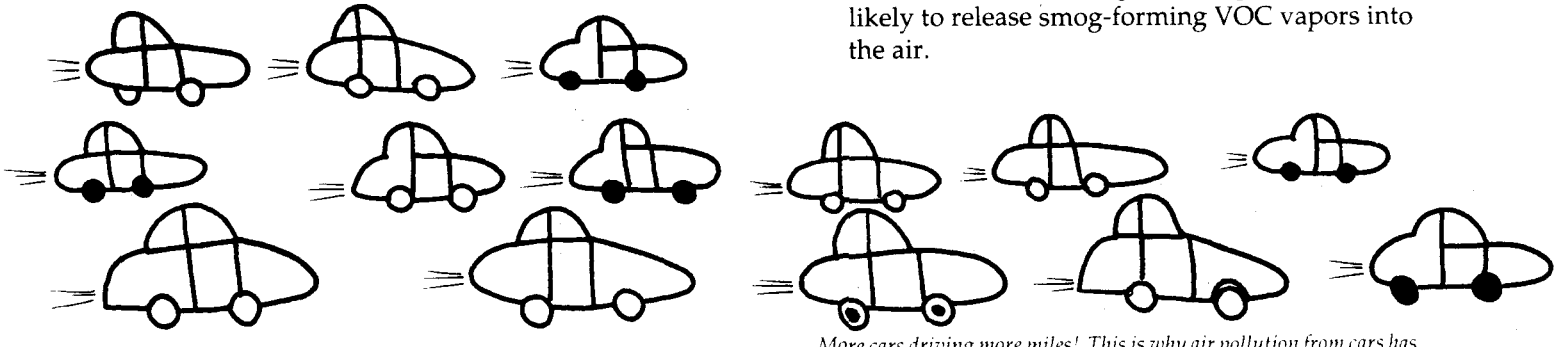
Despite this progress, most types of air pollution from mobile sources have not improved significantly.

At present in the United States:

- Motor vehicles are responsible for up to half of the smog-forming VOCs and nitrogen oxides (NOx).
- Motor vehicles release more than 50 percent of the hazardous air pollutants.
- Motor vehicles release up to 90 percent of the carbon monoxide found in urban air.

What went wrong?

- More people are driving more cars more miles on more trips. In 1970, Americans traveled 1 trillion miles in motor vehicles, and we are expected to drive 4 trillion miles each year by 2000.
- Many people live far from where they work; in many areas, buses, subways and commuter trains are not available. Also, most people still drive to work alone, even when van pools, HOV (high-occupancy vehicle) lanes and other alternatives to one-person-per-car commuting are available.
- Buses and trucks, which produce a lot of pollution, haven't had to clean up their engines and exhaust systems as much as cars.
- Auto fuel has become more polluting. As lead was being phased out, gasoline refiners changed gasoline formulas to make up for octane loss, and the changes made gasoline more likely to release smog-forming VOC vapors into the air.



More cars driving more miles! This is why air pollution from cars has gotten worse even though individual cars produce less pollution than they used to.

Trinity Church (located on Wall Street in Manhattan). The church appears black in the photo, due to many years exposure to soot. Recent cleaning restored the church's stone to its original pinkish color.

Detail of New Jersey Monument, Valley Forge National Historic Park

Detail of Union Soldier and Sailors Monument

NEW YORK

VALLEY FORGE

SEWICKLEY

BALTIMORE

WASHINGTON D.C.

Detail of "Fame", by Isaac Bloom

Marble above-ground burial crypt

Detail of Von Steuben Monument in Lafayette Park (across from the White House)

NEW ORLEANS

GULF OF MEXICO

Air pollution damage to statues and monuments

ATLANTIC OCEAN

Sandstone statue from Herten Castle, near Recklinghausen, Westphalia, built in 1702. The photo on the right was taken in 1908, the one on the left in 1969.

GERMANY

Virgin and Child, Cathedral of Notre Dame de Paris

PARIS

Frieze, east front of the Parthenon, The Acropolis

ROME

ATHENS

The Marcus Aurelius Column

• Although cars have had pollution control devices since the 1970s, the devices only had to work for 50,000 miles, while a car in the United States is usually driven for 100,000 miles.

The 1990 Clean Air Act takes a **comprehensive** approach to reducing pollution from motor vehicles. The Act provides for cleaning up fuels, cars, trucks, buses and other motor vehicles. Auto inspection provisions were included in the law to make sure cars are well maintained. The 1990 law also includes transportation policy changes that can help reduce air pollution.

Cleaner fuels

It will be very difficult to obtain a significant reduction in pollution from motor vehicles unless fuels are cleaned up. The 1990 Clean Air Act will clean up fuels. The phaseout of lead from gasoline will be completed by January 1, 1996. Diesel fuel refining must be changed so that the fuels contain less sulfur, which contributes to acid rain and smog.

Gasoline refiners will have to **reformulate** gasoline sold in the smoggiest areas; this gasoline will contain less volatile organic compounds (VOCs) such as benzene (which is also a hazardous air pollutant that causes cancer and aplastic anemia, a potentially fatal blood disease). Other polluted areas can ask EPA to include them in the reformulated gasoline marketing program. In some areas, wintertime carbon monoxide (CO) pollution is caused by people starting their cars. In these areas, refiners will have to sell **oxyfuel**, gasoline with oxygen added to make the fuel burn more efficiently, thereby reducing carbon monoxide release.

All gasolines will have to contain **detergents**, which, by preventing build-up of engine deposits, keep engines working smoothly and burning fuel cleanly. Low VOC, oxyfuel and detergent gasolines are already sold in several parts of the country.

The 1990 Clean Air Act encourages development and sale of **alternative fuels** such as alcohols, liquefied petroleum gas (LPG) and natural gas.

Gas stations in smoggy areas will install **vapor recovery nozzles** on gas pumps. These nozzles cut down on vapor release when you put gas in your car.

There are several kinds of vapor recovery nozzles. The two nozzles in the left side of the photograph are both vapor recovery nozzles; the nozzle on the right side is not.

Cleaner cars

The 1990 Clean Air Act requires cars to have under-the-hood systems and dashboard warning lights that check whether pollution control devices are working properly. Pollution control devices must work for 100,000 miles, rather than the current 50,000 miles. Auto makers must build some cars that use **clean fuels**, including alcohol, and that release less pollution from the tailpipe through advanced engine design. Electric cars, which are low-pollution vehicles, will also be built. Since California, especially southern California, has the worst smog problems, manufacturers will first sell **clean fuel cars** in a **pilot project** in California. By 1999, at least 500,000 of these clean fuel cars are to be manufactured for sale in California each year. Other states can require that cars meeting the California standards be sold in their states.

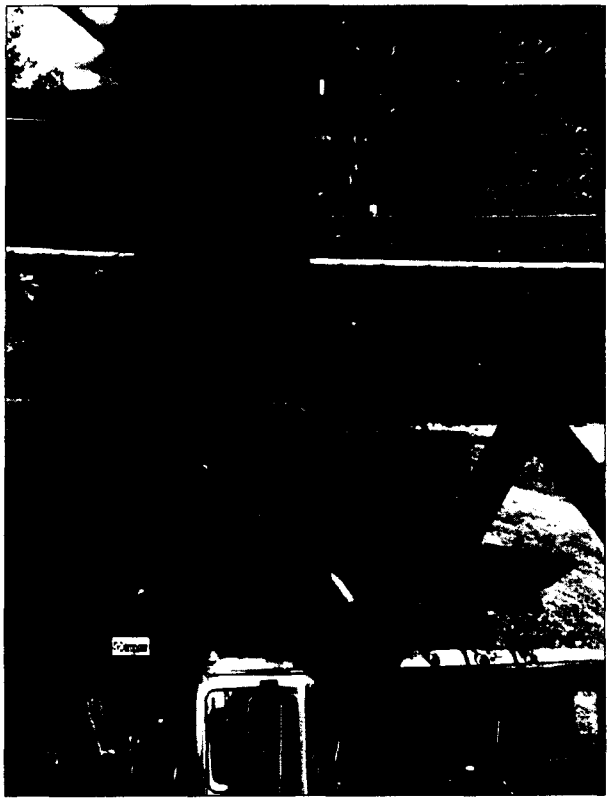
Many companies and government agencies have **fleets** of cars. Fleet-owners in very smoggy areas must buy the new cleaner cars starting in the late 1990s.

Inspection and maintenance (I/M) programs

Under the 1990 Clean Air Act, auto manufacturers will build cleaner cars, and cars will use cleaner fuels. However, to get air pollution down and keep it down, a third program is needed; vehicle **inspection and maintenance** (I/M), which makes sure cars are being maintained adequately to keep pollution **emissions** (releases) low. The 1990 Clean Air Act includes very specific requirements for inspection and maintenance programs.

Before the 1990 Clean Air Act went into effect, seventy United States cities and several states already had auto emission inspection programs. The 1990 law requires inspection and maintenance programs in more areas: forty metropolitan areas, including many in the northeastern United States, are required to start emission inspection and maintenance programs.

Some areas that already have inspection and maintenance programs are required to **enhance** (improve) their emission inspection machines and procedures. Enhanced inspection and maintenance machines and procedures will give a better measurement of the pollution a car releases when it is actually being driven, rather than just sitting parked at the inspection station. Enhanced inspection and maintenance programs may result in changes in where cars are inspected in your local area. Since the enhanced emission inspection and maintenance machines are expensive, some of the private stations now conducting inspection and maintenance programs may not want to buy the enhanced machinery. But the added expense for the new machinery will be more than made up for by air pollution reductions: **emission inspection and maintenance programs are expected to have a big payoff in reducing air pollution from cars.**



Pollution from trucks burning diesel fuel can be especially noticeable. Requirements in the 1990 Clean Air Act will result in much less air pollution from trucks.

Cleaner trucks and buses

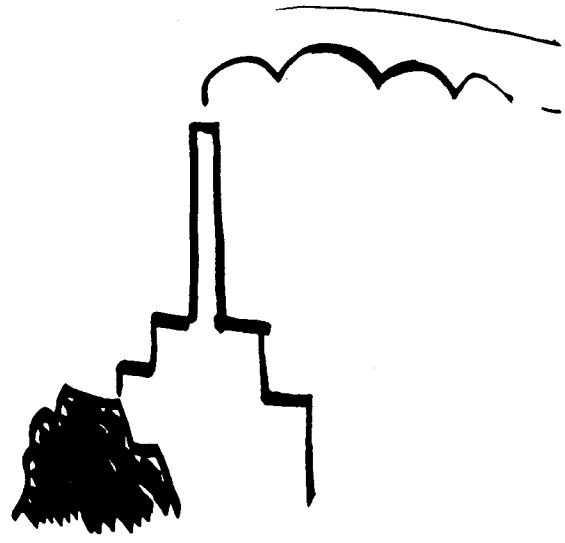
Starting with model year 1994, engines for new big diesel trucks will have to be built to reduce **particulate** (dust, soot) releases by 90 percent. Buses will have to reduce particulate releases even more than trucks. To reduce pollution, companies and governments that own buses or trucks will need to buy new clean models. Small trucks will be cleaned up by requirements similar to those for cars.

Non-road vehicles

Locomotives, construction equipment and even riding mowers may be regulated under the 1990 Clean Air Act. Air pollution from locomotives must be reduced. For the other non-road vehicles, EPA must issue regulations if a study shows that controls would help cut pollution.

Transportation policies

The smoggiest metropolitan areas will have to change their transportation policies to discourage unnecessary auto use, and to encourage efficient commuting (van pools, HOV [high-occupancy vehicle] lanes, etc.). States carrying out the 1990 Clean Air Act may add **surcharges** to parking fees.



Acid rain

You've probably heard of "acid rain". But you may not have heard of acid snow, acid fog or mist, acid gas and acid dust. All of these "acids" are related air pollutants, and can harm your health, cause hazy skies and damage the environment and your property. The 1990 Clean Air Act includes an innovative program to reduce acid air pollutants (all referred to here as "acid rain").

The acid rain that has received the most attention is caused mainly by pollutants from big coal-burning power plants in the Midwest. These plants burn Midwestern and Appalachian coal, some of which contains a lot of sulfur compared to Western coal. Sulfur in coal becomes sulfur dioxide (SO2) when coal is burned. Big power plants burn large quantities of coal, so they release large amounts of sulfur dioxide, as well as NOx (nitrogen oxides). These are acid chemicals, related to two strong acids: sulfuric acid and nitric acid.

The sulfur dioxide and nitrogen oxides released from the Midwestern power plants rise high into the air and are carried by winds toward the East Coast of the U.S. and Canada. When winds blow the acid chemicals into areas where there is wet weather, the acids become part of the rain, snow or fog. In areas where the weather is dry, the acid chemicals may fall to Earth in gases or dusts.

Lakes and streams are normally slightly acid, but acid rain can make them very acid. Very acid conditions can damage plant and animal life.

Acid lakes and streams have been found all over the country. For instance, lakes in Acadia National Park on Maine's Mt. Desert Island have been very acidic, due to pollution from the Midwest and the East Coast. Streams in Maryland and West Virginia, lakes in the Upper Peninsula of Michigan, and lakes and streams in Florida have also been affected by acid rain. Heavy rainstorms and melting snow can cause temporary increases in acidity in lakes and streams in the eastern and western United States. These temporary increases may last for days or even weeks.

Acid rain has damaged trees in the mountains of Vermont and other states. Red spruce trees at high altitudes appear to be especially sensitive to acid rain. The pollutants that cause acid rain can make the air hazy or foggy; this has occurred in the eastern United States, including some mountain areas popular with vacationers, such as the Great Smokies.

Acid rain does more than environmental damage; it can damage health and property as well. Acid air pollution has been linked to breathing and lung problems in children and in people who have asthma. Even healthy people can have their lungs damaged by acid air pollutants. Acid air pollution can eat away stone buildings and statues.

Health, environmental and property damage can also occur when sulfur dioxide pollutes areas close to its source. Sulfur dioxide pollution has been found in towns where paper and wood pulp are processed and in areas close to some power plants. The 1990 Clean Air Act's sulfur dioxide reduction program will complement health-based sulfur dioxide pollution limits already in place to protect the public and the environment from both nearby and distant sources of sulfur dioxide.

The Act takes a new nationwide approach to the acid rain problem. The law sets up a **market-based** system designed to lower sulfur dioxide pollution levels. Beginning in the year 2000, annual releases of sulfur dioxide will be about 40 percent lower than the 1980 levels. Reducing sulfur dioxide releases should cause a major reduction in acid rain.

Phase I of the acid rain reduction program goes into effect in 1995. Big coal-burning boilers in 110 power plants in 21 Midwest, Appalachian, Southeastern and Northeastern states will have to reduce releases of sulfur dioxide. In 2000, **Phase II** of the acid rain program goes into effect, further reducing the sulfur dioxide releases from the big coal-burning power plants and covering other smaller polluters. Total sulfur dioxide releases for the country's power plants will be permanently limited to the level set by the Clean Air Act for the year 2000.

Reductions in sulfur dioxide releases will be obtained through a program of **emission** (release) **allowances**. EPA will issue allowances to power plants covered by the acid rain program; each allowance is worth one ton of sulfur dioxide released from the smokestack. To obtain reductions in sulfur dioxide pollution, allowances are set below the current level of sulfur dioxide releases. Plants may only release as much sulfur dioxide as they have allowances. If a plant expects to release more sulfur dioxide than it has allowances, it has to get more allowances, perhaps by buying them from another power plant that has reduced its sulfur dioxide releases below its number of allowances and therefore has allowances to sell or trade. Allowances can also be bought and sold by "middlemen", such as brokers, or by anyone who wants to take part in the allowances market. Allowances can be traded and sold nationwide. There are stiff penalties for plants which release more pollutants than their allowances cover.

The acid rain program provides bonus allowances to power plants for (among other things) installing **clean coal** technology that reduces sulfur dioxide releases, using renewable energy sources (solar, wind etc.) or encouraging energy conservation by customers so that less power needs to be produced.

How Acid Rain is Formed...

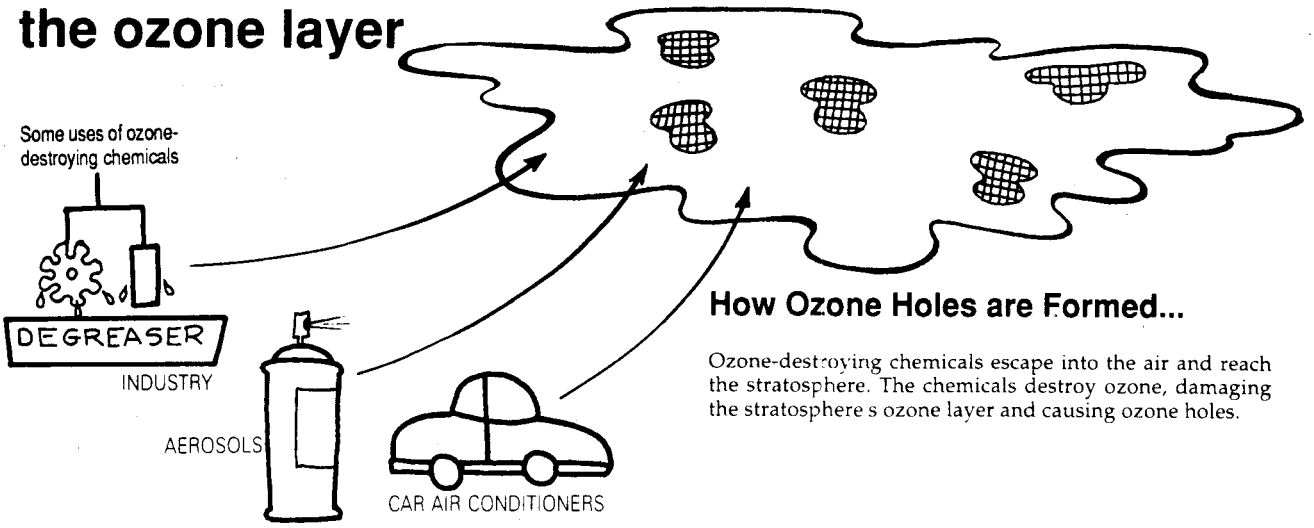
Burning fuels release acid pollutants. These pollutants are carried far from their sources by wind. Depending on the weather, the acid pollutants fall to Earth in wet form (acid rain, snow, mist or fog) or dry form (acid gases or dusts).

All power plants under the acid rain program will have to install **continuous emission monitoring systems (CEMS)**, machines that keep track of how much sulfur dioxide and nitrogen oxides the plant is releasing. A power plant's program for meeting its sulfur dioxide and nitrogen oxide limit will appear on the plant's **permit**, which will be filed with the state and EPA.

To cut down on nitrogen oxide pollution, EPA will require power plants to reduce their nitrogen oxide releases, and will require reductions in nitrogen oxide releases from new cars. Reducing nitrogen oxide releases will reduce both acid rain and smog formation.

The flexible market-based acid rain reduction program is expected to be a model for pollution control efforts in the United States and other countries.

Repairing the ozone layer



How Ozone Holes are Formed...

Ozone-destroying chemicals escape into the air and reach the stratosphere. The chemicals destroy ozone, damaging the stratosphere s ozone layer and causing ozone holes.

cientists have found "holes"[3] in the ozone layer high above the Earth. The 1990 Clean Air Act has provisions for fixing the holes, but repairs will take a long time.

Ozone in the **stratosphere**, a layer of the atmosphere nine to 31 miles above the Earth, serves as a protective shield, filtering out harmful sun rays, including a type of sunlight called **ultraviolet B**. Exposure to ultraviolet B has been linked to development of cataracts (eye damage) and skin cancer.

In the mid-1970s, scientists suggested that chlorofluorocarbons (CFCs) could destroy stratospheric ozone. CFCs were widely used then as aerosol propellants in consumer products such as hairsprays and deodorants, and for many uses in industry. Because of concern about the possible effects of CFCs on the ozone layer, in 1978 the U.S. government banned CFCs as propellants in aerosol cans.

Since the aerosol ban, scientists have been measuring the ozone layer. A few years ago, an ozone hole was found above Antarctica, including the area of the South Pole. This hole, which has been appearing each year during the Antarctic winter (our summer), is bigger than the continental United States. More recently, ozone thinning has been found in the stratosphere above the northern half of the United States; the hole extends over Canada and up into the Arctic regions (the area of the North Pole). The hole was first found only in winter and spring, but more recently has continued into summer. Between 1978 and 1991, there was a 4-5 percent loss of ozone in the stratosphere over the United States; this is a significant loss of ozone. Ozone holes have also been found over northern Europe.

What could a thinned-out ozone layer do to people's lives? There could be more skin cancers and cataracts Scientists are looking into possible harm to agriculture, and there is already some evidence of damage to plant life in Antarctic seas.

Evidence that the ozone layer is dwindling led 93 nations, including the major industrialized nations, to agree to cooperate in reducing production and use of chemicals that destroy the ozone layer. As it became clear that the ozone layer was thinning even more quickly than first thought, the agreement was revised to speed up the phase-out of ozone-destroying chemicals.

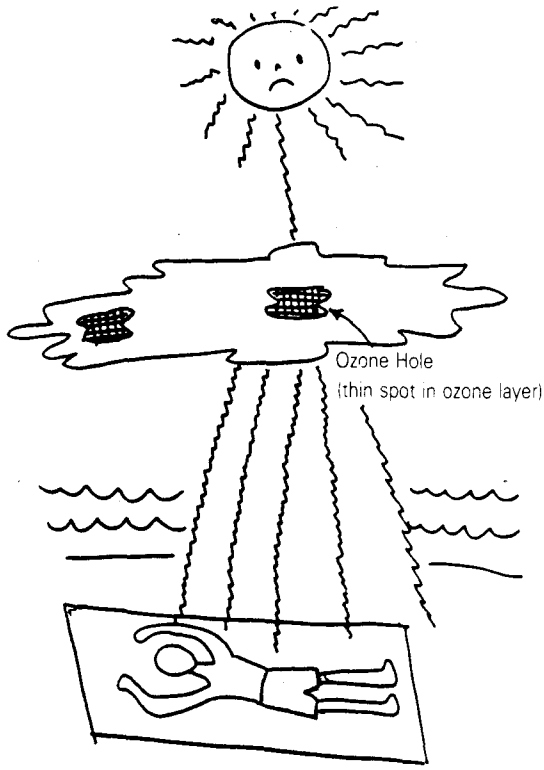
Ozone-destroying chemicals

Name	Use	When U.S. production ends*
CFCs (chlorofluorocarbons)	solvents, aerosol sprays (most spray can uses banned in 1970s), foaming agents in plastic manufacture	January 1, 1996
Halons	fire extinguishers	January 1, 1994
Carbon tetrachloride	solvents, chemical manufacture; carbon tetrachloride causes cancer in animals	January 1, 1996
Methyl chloroform (1,1,1-trichloroethane)	very widely-used solvent; in many workplace and consumer solvents, including auto repair and maintenance products	January 1, 1996
HCFCs (hydro CFCs)	CFC substitutes; chemicals slightly different from CFCs	January 1, 2003**

*The 1990 Clean Air Act includes a schedule for ending United States production of ozone-destroying chemicals, and provisions for speeding up the phase-out schedule if that is necessary. The dates in this table are "speeded-up" dates, proposed by EPA in early 1993.

**Production of the HCFC with the most severe ozone-destroying effects will end by January 1, 2003. Production of the rest of the HCFCs will end by January 1, 2030.

[3] Ozone holes aren't like doughnut holes; they're not empty spaces in the sky. Ozone holes are much like the worn-out places in an old sock or sweater: there are still threads covering the worn-out area, but the fabric can be so thin you can see right through it.



When the ozone layer is damaged, there is an increase in harmful rays from the sunreaching the Earth. These rays can harm both human health and the environment.

Unfortunately, it will be a long time before we see the ozone layer repaired. Because of the ozone-destroying chemicals already in the stratosphere and those that will arrive within the next few years, ozone destruction will likely continue for another twenty years.

The 1990 Clean Air Act sets a schedule for ending production of chemicals that destroy stratospheric ozone. Chemicals that cause the most damage will be phased out first. The phase-out schedule can be speeded up if an earlier end to production of ozone-destroying substances is needed to protect the ozone layer. The table on this page on **Ozone-destroying chemicals** includes "speeded-up" phase-out dates which were proposed by EPA in early 1993.

CFCs, Halons, HCFCs (hydrochlorofluorocarbons)[4] and other ozone-destroying chemicals were listed by Congress in the 1990 Clean Air Act and must be phased out. The Act also lets EPA list other chemicals that destroy ozone.

EPA issues **allowances** to control manufacture of chemicals being phased out. Companies can also sell unused allowances to companies still making the chemicals or can use the allowances, within certain limits, to make a different, less ozone-destroying chemical on the phase-out list.

In addition to requiring the phasing out of production of ozone-destroying chemicals, the Clean Air Act takes other steps to protect the ozone layer. The law requires recycling of CFCs and labeling of products containing ozone-destroying chemicals. The 1990 Clean Air Act also encourages the development of "ozone-friendly" substitutes for ozone-destroying chemicals.

CFCs from car air conditioners are the biggest single source of ozone-destroying chemicals. By the end of 1993, all car air conditioner systems must be serviced using equipment that **recycles** CFCs and prevents their release into the air. Larger auto service shops were required to start using this special equipment in January 1992. Only specially-trained and certified repair persons will be allowed to buy the small cans of CFCs used in servicing auto air conditioners.

As CFCs and related chemicals are phased out, appliances and industrial processes that now use the chemicals will change. For example, industrial and home refrigerators will be changed to use refrigerants that don't destroy ozone. In the meantime, refrigerator servicing and disposal will have to be done in ways that don't release CFCs. Methyl chloroform, also called 1,1,1-trichloroethane, which will be phased out by 1996, is a very widely-used solvent found in products such as automobile brake cleaners (often sold as aerosol sprays) and spot removers used to take greasy stains off fabrics. Replacing methyl chloroform in workplace and consumer products will lead to changes in many products and processes.

As substitutes are developed for ozone-destroying substances, before the chemicals can be produced and sold, EPA must determine that the replacements will be safe for health and the environment.

Consumer products containing CFCs and other ozone-destroying chemicals will have to be reformulated; these are discussed in the following section on **Consumer products**.

[4] HCFCs and Halons are chemicals much like CFCs. HCFCs may be somewhat less harmful to the ozone layer than are CFCs.

Consumer products

air sprays, paints, foam plastic products (such as disposable styrofoam coffee cups), carburetor and choke sprays–all are consumer products that may be regulated under the 1990 Clean Air Act. These products will be regulated to reduce releases of smog-forming VOCs and ozone-destroying chemicals (CFCs and related chemicals).

By May 1993, consumer products containing CFCs and related chemicals identified in the 1990 Clean Air Act as most damaging to the ozone layer have this label:

> WARNING: contains or manufactured with (name of chemical), a substance which harms public health and the environment by destroying ozone in the upper atmosphere.

All products containing less destructive ozone-destroying chemicals identified in the 1990 Act must be labeled by 2015.

Consumers should be aware of product changes and any safety or health problems that may be caused by the new ozone-safe formulations. **Material safety data sheets** for the products should be read for health and safety information and information on how to use and dispose of the product.[5]

The 1990 Clean Air Act orders EPA to study VOC releases from consumer products and report to Congress by 1993 on whether these products should be regulated. If they are to be regulated, EPA is to list the consumer products that account for at least 80 percent of VOC releases, and issue regulations for product categories, starting with the worst polluters. Labeling, repackaging, chemical formula changes, fees or other procedures may be used to reduce VOC releases.

[5] Material safety data sheets are product safety information sheets prepared by manufacturers and marketers. These sheets can be obtained by requesting them from the manufacturer. Some stores, such as hardware stores, may have material safety data sheets on hand for products they sell.

Home woodstoves

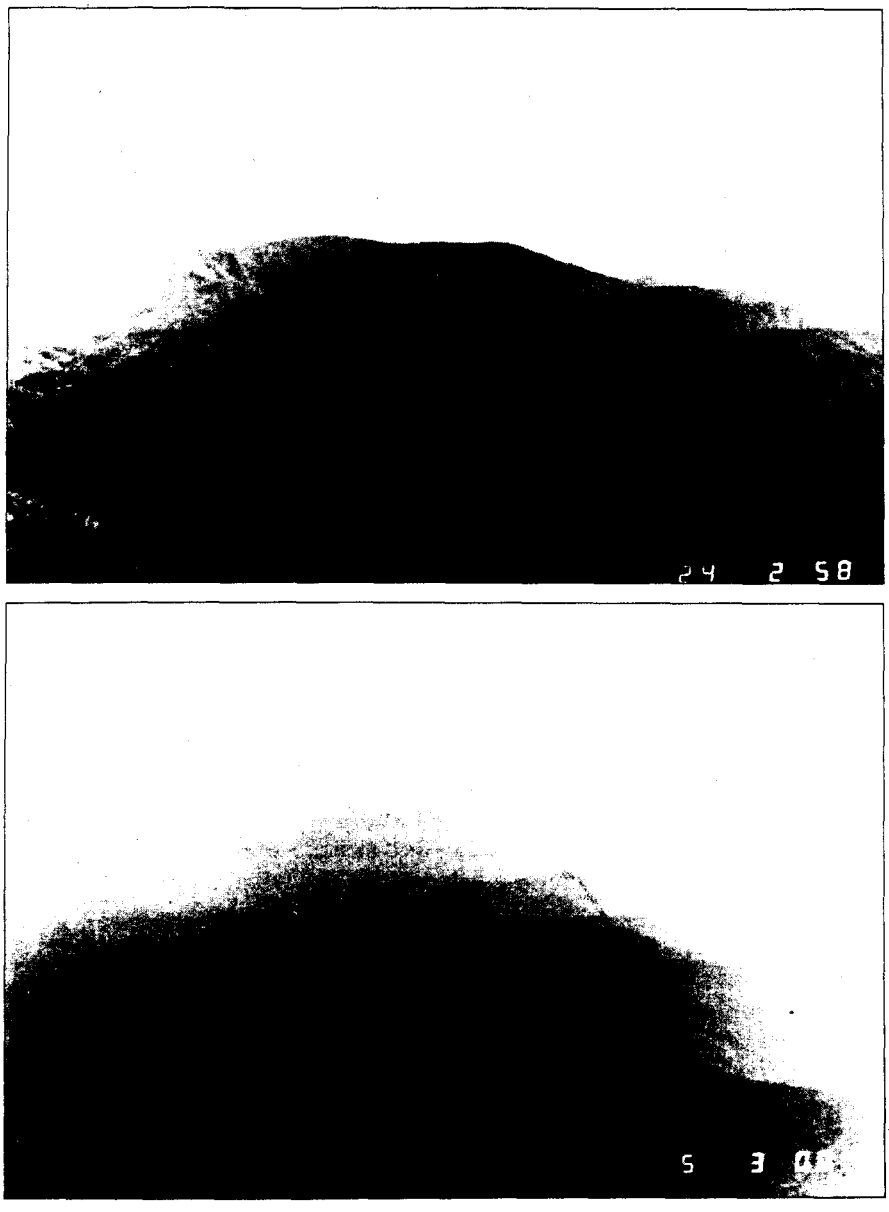
oodstoves and fireplace inserts have become very popular in the past twenty years. Although these wood-burning heat suppliers are relatively cheap to operate, they have some disadvantages, including polluting the air. In some areas of the country, wintertime air pollution from wood smoke has become so bad that governments have had to **curtail** the use of woodstoves and fireplaces under certain weather and pollution conditions.

Wood smoke often contains a lot of **particulates** (dust, soot) and much higher levels of hazardous air pollutants, including some cancer-causing chemicals, than smoke from oil- or gas-fired furnaces. Steps to clean up wood smoke pollution have included redesigning the burning system in woodstoves; newer woodstoves put out much less pollution than older models.

Under the 1990 Act, EPA has issued guidelines for reducing pollution from home wood-burning. These guidelines, which are not requirements, include design information for less-polluting stoves and fireplaces.

New wood stoves must meet pollution reduction requirements issued by EPA.

How do you know the Clean Air Act is working?



Great Smoky Mountains National Park. Top: Clear day (photo taken at 7 p.m.). Bottom: haze (photo taken at 3 p.m.).

Everyone in the United States has a role to play to make the Clean Air Act a success. One of the most important things Americans can do is to keep track of how the law is working.

There are several ways you'll be able to tell how well the Clean Air Act is working.

EPA, state, regional and local air pollution control agencies have to issue regulations (rules), give out permits, enforce the Act against violators and do other things described in the Clean Air Act.

Many groups with an interest in how the Clean Air Act works are watching EPA and the other air pollution control agencies. These groups include local and national business and trade organizations (from state associations of dry cleaners to the United States Chamber of Commerce), local community organizations (such as neighborhood associations), and local and national environmental and public health organizations (such as the Clean Air Network of the Natural Resources Defense Council and the American Lung Association). If

you belong to one or more of these groups, their bulletins or newsletters will keep you informed.

Newspapers, radio and television will report on how the Act is being carried out, both nationally and in your local area.

You can also contact EPA and your state, regional or local air pollution control agencies to receive information directly on Clean Air Act activities.

The United States Congress monitors how federal agencies are carrying out the laws. Contact your Congressional representative or your Senator to get more information on Congressional hearings and reports on how EPA is carrying out the Clean Air Act. You can also request reports from the United States General Accounting Office (GAO), the Congressional investigative agency which reviews how EPA carries out the Clean Air Act.

State legislatures review how state agencies carry out air pollution control laws. Ask your state representative for more information.

Over time, the Clean Air Act will reduce air pollution. How will you know this is happening?

Sometimes reduced pollution causes changes so great you can literally see the difference: the air is much cleaner and clearer than it was! But you can only be sure there has been a permanent change for the better if the good air continues for a long time—weeks, months or years, during different weather conditions.

Monitoring air quality is the best way to know if the air is getting cleaner, because monitoring produces numbers that tell how much of a pollutant is in the air. You can request EPA, state or local monitoring reports that show changes over time. For example, sulfur dioxide levels will drop as power plants and other sources are cleaned up. This clean-up will happen in stages through the year 2000, so monitoring reports will tell you how the cleanup is going. Your eyes, nose and throat may also detect the change as smoggy areas clean up, but monitoring data remain the best way to check on overall improvement in air quality over time.

Monitoring will be carried out by EPA, state and regional air pollution control agencies, and by the owners of individual sources. Air pollution monitoring stations are set up all over the country, collecting information on various pollutants. Contact EPA, your state, regional or local air pollution control agency, for information on monitoring programs and monitoring reports.

How will you know the Clean Air Act is improving the environment?

Some environmental improvements will be relatively easy to detect. People who live in the eastern United States should see much less summertime haze. Also, we'll know the ozone level is increasing in the stratosphere because scientists measure ozone content. What about lakes and streams harmed by acid rain and acid aerosols? We should see improvement as sulfur dioxide and nitrogen oxide levels decline, resulting in decreased acid rain and acid aerosols, but we don't know exactly how long it will take to restore lakes and streams and we don't know exactly what the lakes and streams and their inhabitants, including fish, will be like when air pollution is reduced.

What will be the benefits for human health of reductions in air pollution?

People who now live in smoggy areas will have less eye, nose and throat irritation as smog levels are reduced. Reductions in air pollution will also lead to declines in cancer and other serious health problems.

Keep an eye on the Clean Air Act; it could change your life!

Glossary

This glossary has definitions for technical words used in the Clean Air Act summary. For the most part, the glossary provides fuller definitions than those given in the summary itself. When a word or group of words is printed in italics within a definition, that tells you that you'll find a definition of the word or group of words elsewhere in the glossary.

Acid rain — Air *pollution* produced when acid chemicals are incorporated into rain, snow, fog or mist. The "acid" in acid rain comes from sulfur oxides and *nitrogen oxides*, products of burning coal and other fuels and from certain industrial processes. The sulfur oxides and nitrogen oxides are related to two strong acids: sulfuric acid and nitric acid. When sulfur dioxide and nitrogen oxides are released from power plants and other *sources*, winds blow them far from their source. If the acid chemicals in the air are blown into areas where the weather is wet, the acids can fall to Earth in the rain, snow, fog or mist. In areas where the weather is dry, the acid chemicals may become incorporated into dusts or smokes. Acid rain can damage the environment, human health and property.

Alternative fuels — Fuels that can replace ordinary gasoline. Alternative fuels may have particularly desirable energy efficiency and *pollution* reduction features. Alternative fuels include compressed natural gas, alcohols, liquefied petroleum gas (LPG), and electricity. The 1990 *Clean Air Act* encourages development and sale of alternative fuels.

Attainment area — A geographic area in which levels of a criteria air pollutant meet the health-based primary standard (national ambient air quality standard, or NAAQS) for the pollutant. An area may have on acceptable level for one criteria air pollutant, but may have unacceptable levels for others. Thus, an area could be both attainment and nonattainment at the same time. Attainment areas are defined using federal pollutant limits set by EPA.

Carbon monoxide **(CO)** — A colorless, odorless, poisonous gas, produced by incomplete burning of carbon-based fuel including gasoline, oil and wood. Carbon monoxide is also produced from incomplete *combustion* of many natural and synthetic products. For instance, cigarette smoke contains carbon monoxide. When carbon monoxide gets into the body, the carbon monoxide combines with chemicals in the blood and prevents the blood from bringing oxygen to cells, tissues and organs. The body's parts need oxygen for energy, so high-level exposures to carbon monoxide can cause serious health effects, with death possible from massive exposures. Symptoms of exposure to carbon monoxide can include vision problems, reduced alertness, and general reduction in mental and physical functions. Carbon monoxide exposures are especially harmful to people with heart, lung and circulatory system diseases.

CFCs **(chlorofluorocarbons)**— These chemicals and some related chemicals have been used in great quantities in industry, for refrigeration and air conditioning, and in consumer products. CFCs and their relatives, when released into the air, rise into the *stratosphere*, a layer of the atmosphere high above the Earth. In the stratosphere, CFCs and their relatives take part in chemical reactions which result in reduction of the stratospheric *ozone* layer, which protects the Earth's surface from harmful effects of radiation from the sun. The 1990 *Clean Air Act* includes provisions for reducing releases (emissions) and eliminating production and use of these ozone-destroying chemicals.

Clean Air Act — The original Clean Air Act was passed in 1963, but our national air pollution control program is actually based on the 1970 version of the law. The 1990 Clean Air Act Amendments are the most far-reaching revisions of the 1970 law. In this summary, we refer to the 1990 amendments as the 1990 Clean Air Act.

Clean fuels — Low-pollution fuels that can replace ordinary gasoline. These are *alternative* fuels, including gasohol (gasoline-alcohol mixtures), natural gas and LPG (liquefied petroleum gas).

Combustion — burning. Many important pollutants, such as *sulfur dioxide*, *nitrogen oxides*, and *particulates* (PM-10) are combustion products, often products of the burning of fuels such as coal, oil, gas and wood.

Continuous emission monitoring systems **(CEMS)**— machines which measure, on a continuous basis, *pollutants* released by a *source*. The 1990 *Clean Air Act* requires continuous emission monitoring systems for certain large sources.

Control technology; control measures — equipment, processes or actions used to reduce air pollution. The extent of pollution reduction varies among technologies and measures. In general, control technologies and measures that do the best job of reducing pollution will be required in the areas with the worst pollution. For example, the *best available control technology/best available control measures* (BACT BACM) will be required in serious *nonattainment areas* for *particulates*, a *criteria air pollutant*. A similar high level of pollution reduction will be achieved with *maximum achievable control technology* (MACT) which will be required for *sources* releasing *hazardous air pollutants*.

Criteria air pollutants — a group of very common air *pollutants* regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution). Criteria air pollutants are widely distributed all over the country.

Curtailment programs — restrictions on operation of fireplaces and woodstoves in areas where these home heat sources make major contributions to *pollution*.

Emission — release of *pollutants* into the air from a *source*. We say sources *emit* pollutants. *Continuous emission monitoring systems* (CEMS) are machines which some large sources are required to install, to make continuous measurements of pollutant release.

Enforcement — the legal methods used to make polluters obey the *Clean Air Act*. Enforcement methods include citations of polluters for violations of the law (citations are much like traffic tickets), fines and even jail terms. EPA and the state and local governments are responsible for enforcement of the *Clean Air Act*, but if they don't enforce the law, members of the public can sue EPA or the states to get action: Citizens can also sue violating *sources*, apart from any action EPA or state or local governments have taken. Before the 1990 Clean Air Act, all enforcement actions had to be handled through the courts. The 1990 *Clean Air Act* gave EPA authority so that, in some cases, EPA can fine violators without going to court first. The purpose of this new authority is to speed up violating sources' compliance with the law and reduce court time and cost.

Hazardous air pollutants **(HAPs)** — chemicals that cause serious health and environmental effects. Health effects include cancer, birth defects, nervous system problems and death due to massive accidental releases such as occurred at the pesticide plant in Bhopal, India. Hazardous air pollutants are released by *sources* such as chemical plants, dry cleaners, printing plants, and motor vehicles (cars, trucks, buses, etc.)

***Inspection and maintenance program* (I/M program)** — Auto inspection programs are required for some polluted areas. These periodic inspections, usually done once a year or once every two years, check whether a car is being maintained to keep *pollution* down and whether emission control systems are working properly. Vehicles which do not pass inspection must be repaired. As of 1992, 111 urban areas in 35 states already had I/M programs. Under the 1990 *Clean Air Act*, some especially polluted areas will have to have *enhanced inspection and maintenance programs*, using special machines that can check for such things as how much pollution a car produces during actual driving conditions.

International air pollution — Canada and Mexico, the United States' neighbors, share the air at our borders. *Pollution* moves across the national borders; this international pollution can be serious. The 1990 *Clean Air Act* includes provisions for cooperative efforts to reduce pollution that originates in one country and affects another.

Interstate air pollution — In many areas, two or more states share the same air. We say these states are in the same air basin defined by geography and wind patterns. Often, air *pollution* moves out of the state in which it is produced into another state. Some pollutants, such as the power plant *combustion* products that cause *acid rain*, may travel over several states before affecting health, the environment and property. The 1990 *Clean Air Act* includes many provisions, such as interstate compacts, to help states work together to protect the air they share. Reducing interstate air pollution is very important since many Americans live and work in areas where more than one state is part of a single metropolitan area.

***Material safety data sheets* (MSDS)** — product safety information sheets prepared by manufacturers and marketers of products containing toxic chemicals. These sheets can be obtained by requesting them from the manufacturer or marketer. Some stores, such as hardware stores, may have material safety data sheets on hand for products they sell.

Mobile sources — moving objects that release *pollution*; mobile sources include cars, trucks, buses, planes, trains, motorcycles and gasoline-powered lawn mowers. Mobile sources are divided into two groups: road vehicles, which includes cars, trucks and buses, and non-road vehicles, which includes trains, planes and lawn mowers.

***Monitoring* (monitor)** — Measurement of air *pollution* is referred to as monitoring. EPA, state and local agencies measure the types and amounts of pollutants in community air. The 1990 *Clean Air Act* requires certain large polluters to perform enhanced monitoring to provide an accurate picture of their pollutant releases. Enhanced monitoring programs may include keeping records on materials used by the *source*, periodic inspections, and installation of *continuous emission monitoring systems* (CEMS). Continuous emission monitoring systems will measure, on a continuous basis, how much pollution is being released into the air. The 1990 *Clean Air Act* requires states to monitor community air in polluted areas to check on whether the areas are being cleaned up according to schedules set out in the law.

***Nitrogen oxides* (NOx)** — a *criteria air pollutant*. Nitrogen oxides are produced from burning fuels, including gasoline and coal. Nitrogen oxides are smog-formers, which react with volatile organic compounds to form smog. Nitrogen oxides are also major components of acid rain.

Nonattainment area — a geographic area in which the level of a *criteria air pollutant* is higher than the level allowed by the federal standards. A single geographic area may have acceptable levels of one criteria air pollutant but unacceptable levels of one or more other criteria air pollutants; thus, an area can be both attainment and nonattainment at the same time. It has been estimated that 60% of Americans live in nonattainment areas.

Offset — a method used in the 1990 *Clean Air Act* to give companies which own or operate large (major) *sources* in *nonattainment areas* flexibility in meeting overall pollution reduction requirements when changing production processes. If the owner or operator of the source wishes to increase release of a *criteria air pollutant*, an *offset* (reduction of a somewhat greater amount of the same pollutant) must be obtained either at the same plant or by purchasing offsets from another company.

***Oxygenated fuel* (oxyfuel)** — special type of gasoline, which burns more completely than regular gasoline in cold start conditions; more complete burning results in reduced production of *carbon monoxide*, a *criteria air pollutant*. In some parts of the country, carbon monoxide release from cars starting up in cold weather makes a major contribution to pollution. In these areas, gasoline refiners must market oxygenated fuels, which contain a higher oxygen content than regular gasoline. Some gasoline companies started selling oxyfuels in cities with carbon monoxide problems before the 1990 *Clean Air Act* was passed.

Ozone — a gas which is a variety of oxygen. The oxygen gas found in the air consists of two oxygen atoms stuck together; this is molecular oxygen. Ozone consists of three oxygen atoms stuck together into an ozone molecule. Ozone occurs in nature; it produces the sharp smell you notice near a lightning strike. High concentrations of ozone gas are found in a layer of the atmosphere—the *stratosphere*—high above the Earth. Stratospheric ozone shields the Earth against harmful rays from the sun, particularly *ultraviolet B*. *Smog*'s main component is ozone; this ground-level ozone is a product of reactions among chemicals produced by burning coal, gasoline and other fuels, and chemicals found in products including solvents, paints, hairsprays, etc.

Ozone hole — thin place in the ozone layer located in the *stratosphere* high above the Earth. Stratospheric ozone thinning has been linked to destruction of stratospheric ozone by *CFCs* and related chemicals. The 1990 *Clean Air Act* has provisions to reduce and eliminate ozone-destroying chemicals' production and use. Ozone holes have been found above Antarctica and above Canada and northern parts of the United States, as well as above northern Europe.

***Particulates; particulate matter* (PM-10)** — a *criteria air pollutant*. Particulate matter includes dust, soot and other tiny bits of solid materials that are released into and move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks and buses, incineration of garbage, mixing and application of fertilizers and pesticides, road construction, industrial processes such as steelmaking, mining operations, agricultural burning (field and slash burning), and operation of fireplaces and woodstoves. Particulate pollution can cause eye, nose and throat irritation and other health problems.

Permit — a document that resembles a license, required by the *Clean Air Act* for big (major) sources of air pollution, such as power plants, chemical factories and, in some cases, smaller polluters. Usually permits will be given out by states, but if EPA has disapproved part or all of a state permit program, EPA will give out the permits in that state. The 1990 *Clean Air Act* includes requirements for permit applications, including provisions for members of the public to participate in

state and EPA reviews of permit applications. Permits will have, in one place, information on all the regulated pollutants at a source. Permits include information on which pollutants are being released, how much the source is allowed to release, and the program that will be used to meet pollutant release requirements. Permits are required both for the operation of plants (operating permits) and for the construction of new plants. The 1990 *Clean Air Act* introduced a nationwide permit system for air pollution control.

Permit fees — fees paid by businesses required to have a *permit*. Permit fees are like the fees drivers pay to register their cars. The money from permit fees will help pay for state air pollution control activities.

***Pollutants* (pollution)** — unwanted chemicals or other materials found in the air. Pollutants can harm health, the environment and property. Many air pollutants occur as gases or vapors, but some are very tiny solid particles: dust, smoke or soot.

Primary standard — a *pollution* limit based on health effects. Primary standards are set for *criteria air pollutants*.

Reformulated gasoline — specially-refined gasoline with low levels of *smog*-forming *volatile organic compounds* (VOCs) and low levels of *hazardous air pollutants*. The 1990 *Clean Air Act* requires sale of reformulated gasoline in the nine smoggiest areas. Reformulated gasolines were sold in several smoggy areas even before the 1990 *Clean Air Act* was passed.

Secondary standard — a *pollution* limit based on environmental effects such as damage to property, plants, visibility, etc. Secondary standards are set for *criteria air pollutants*.

Smog — a mixture of *pollutants*, principally ground-level *ozone*, produced by chemical reactions in the air involving smog-forming chemicals. A major portion of smog-formers come from burning of petroleum-based fuels such as gasoline. Other smog-formers, *volatile organic compounds*, are found in products such as paints and solvents. Smog can harm health, damage the environment and cause poor visibility. Major smog occurrences are often linked to heavy motor vehicle traffic, sunshine, high temperatures and calm winds or *temperature inversion* (weather condition in which warm air is trapped close to the ground instead of rising). Smog is often worse away from the source of the smog-forming chemicals, since the chemical reactions that result in smog occur in the sky while the reacting chemicals are being blown away from their sources by winds.

Source — any place or object from which *pollutants* are released. A source can be a power plant, factory, dry cleaning business, gas station or farm. Cars, trucks and other motor vehicles are sources, and consumer products and machines used in industry can be sources too. Sources that stay in one place are referred to as *stationary sources*; sources that move around, such as cars or planes, are called *mobile sources*.

***State implementation plan* (SIP)** — a detailed description of the programs a state will use to carry out its responsibilities under the *Clean Air Act*. State implementation plans are collections of the regulations used by a state to reduce air *pollution*. The *Clean Air Act* requires that EPA approve each state implementation plan. Members of the public are given opportunities to participate in review and approval of state implementation plans.

Stationary source — a place or object from which *pollutants* are released and which does not move around. Stationary sources include power plants, gas stations, incinerators, houses etc.

Stratosphere — part of the atmosphere, the gases that encircle the Earth. The stratosphere is a layer of the atmosphere 9-31 miles above the Earth. *Ozone* in the stratosphere filters out harmful sun rays, including a type of sunlight called *ultraviolet B*, which has been linked to health and environmental damage.

Sulfur dioxide — a *criteria air pollutant*. Sulfur dioxide is a gas produced by burning coal, most notably in power plants. Some industrial processes, such as production of paper and smelting of metals, produce sulfur dioxide. Sulfur dioxide is closely related to sulfuric acid, a strong acid. Sulfur dioxide plays an important role in the production of *acid rain*.

Temperature inversion — weather condition that as often associated with serious *smog*. In a temperature inversion, warm air doesn't rise because it is trapped near the ground by a layer of heavy colder air above it. *Pollutants* in the warm air, especially smog and smog-forming chemicals, including *volatile organic compounds*, are trapped close to the ground. As people continue driving, and sources other than motor vehicles continue to release smog-forming pollutants into the air, the smog level keeps getting worse.

***Ultraviolet B* (UVB)** — a type of sunlight. The *ozone* in the *stratosphere*, high above the Earth, filters out ultraviolet B rays and keeps them from reaching the Earth. Ultraviolet B exposure has been associated with skin cancer, eye cataracts and damage to the environment. Thinning of the ozone layer in the stratosphere results in increased amounts of ultraviolet B reaching the Earth.

Vapor recovery nozzles — special gas pump nozzles that will reduce release of gasoline vapor into the air when people put gas in their cars. There are several types of vapor recovery nozzles, so nozzles may look different at different gas stations. The 1990 *Clean Air Act* requires installation of vapor recovery nozzles at gas stations in *smoggy* areas.

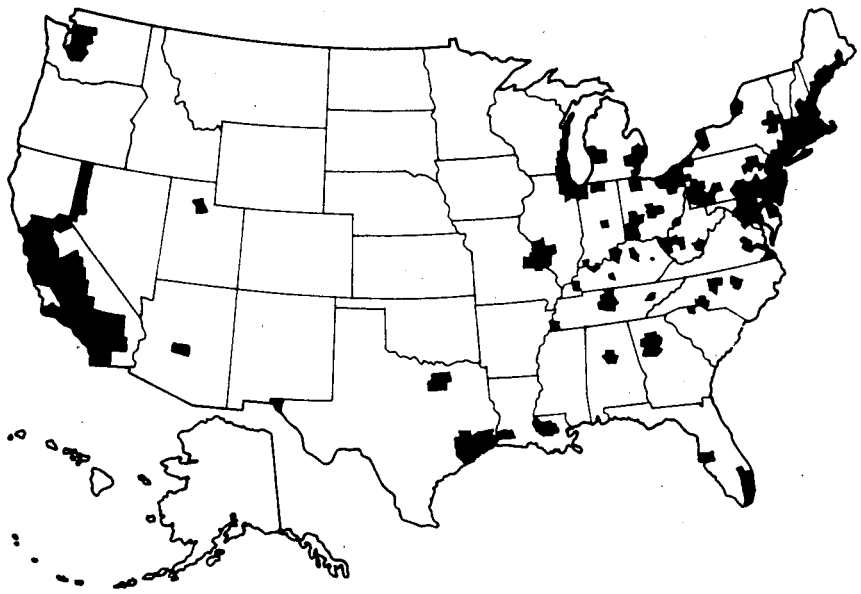
***Volatile organic compounds* (VOCs)** — Organic chemicals all contain the element carbon (C); organic chemicals are the basic chemicals found in living things and in products derived from living things, such as coal, petroleum and refined petroleum products. Many of the organic chemicals we use do not occur in Nature, but were synthesized by chemists in laboratories. *Volatile* chemicals produce *vapors* readily; at room temperature and normal atmospheric pressure, vapors escape easily from volatile liquid chemicals. Volatile organic chemicals include gasoline, industrial chemicals such as benzene, solvents such as toluene and xylene, and tetrachloroethylene (perchloroethylene, the principal dry cleaning solvent). Many volatile organic chemicals are also *hazardous air pollutants*; for example, benzene causes cancer.

The Common Air Pollutants (Criteria Air Pollutants)

Name	Source	Health Effects	Environmental Effects	Property Damage
Ozone (ground-level ozone is the principal component of smog)	chemical reaction of pollutants; VOCs and NOx	breathing problems, reduced lung function, asthma, irritates eyes, stuffy nose, reduced resistance to colds and other infections, may speed up aging of lung tissue	ozone can damage plants and trees; smog can cause reduced visibility	Damages rubber, fabrics, etc.
VOCs* (volatile organic compounds); smog-formers	VOCs are released from burning fuel (gasoline, oil, wood, coal, natural gas, etc.), solvents, paints glues and other products used at work or at home. Cars are an important source of VOCs. VOCs include chemicals such as benzene, toluene, methylene chloride and methyl chloroform	In addition to ozone (smog) effects, many VOCs can cause serious health problems such as cancer and other effects	In addition to ozone (smog) effects, some VOCs such as formaldehyde and ethylene may harm plants	
Nitrogen Dioxide (one of the NOx); smog-forming chemical	burning of gasoline, natural gas, coal, oil etc. Cars are an important source of NO^2.	lung damage, illnesses of breathing passages and lungs (respiratory system)	nitrogen dioxide is an ingredient of acid rain (acid aerosols), which can damage trees and lakes. Acid aerosols can reduce visibility.	acid aerosols can eat away stone used on buildings, statues, monuments, etc.
Carbon Monoxide (CO)	burning of gasoline, wood, natural gas, coal, oil, etc.	reduces ability of blood to bring oxygen to body cells and tissues; cells and tissues need oxygen to work. Carbon monoxide may be particularly hazardous to people who have heart or circulatory (blood vessel) problems and people who have damaged lungs or breathing passages		
Particulate Matter (PM-10); (dust, smoke, soot)	burning of wood, diesel and other fuels; industrial plants; agriculture (plowing, burning off fields); unpaved roads	nose and throat irritation, lung damage, bronchitis, early death	particulates are the main source of haze that reduces visibility	ashes, soots, smokes and dusts can dirty and discolor structures and other property, including clothes and furniture
Sulfur Dioxide	burning of coal and oil, especially high-sulfur coal from the Eastern United States; industrial processes (paper, metals)	breathing problems, may cause permanent damage to lungs	SO_2 is an ingredient in acid rain (acid aerosols), which can damage trees and lakes. Acid aerosols can also reduce visibility.	acid aerosols can eat away stone used in buildings, statues, monuments, etc.
Lead	leaded gasoline (being phased out), paint (houses, cars), smelters (metal refineries); manufacture of lead storage batteries	brain and other nervous system damage; children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead causes digestive and other health problems.	Lead can harm wildlife.	

*All VOCs contain carbon (C), the basic chemical element found in living beings. Carbon-containing chemicals are called *organic*. *Volatile* chemicals escape into the air easily. Many VOCs, such as the chemicals listed in the table, are also *hazardous air pollutants*, which can cause very serious illnesses. EPA does not list VOCs as criteria air pollutants, but they are included in this list of pollutants because efforts to control smog target VOCs for reduction.

Ozone Nonattainment Areas



EXTREME

Ozone standard must be met by 2010

Los Angeles-South Coast Air Basin, CA

SEVERE

Ozone standard must be met by 2007

Chicago-Gary-Lake County, IL-IN
Houston-Galveston-Brazoria, TX
Milwaukee-Racine, WI
New York-N New Jer-Long Is, NY-NJ-CT
Southeast Desert Modified-Air Quality Maintenance Area, CA

SEVERE

Ozone standard must be met by 2005

Baltimore, MD
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD
San Diego, CA
Ventura Co, CA

SERIOUS

Ozone standard must be met by 1999

Atlanta, GA
Baton Rouge, LA
Beaumont-Port Arthur, TX
Boston-Lawrence-Worcester (E.MS), MA-NH
El Paso, TX
Greater Connecticut
Portsmouth-Dover-Rochester, NH
Providence (All RI), RI
Sacramento Metro, CA
San Joaquin Valley, CA
Springfield (Western MA), MA
Washington, DC-MD-VA

MODERATE

Ozone standard must be met by November 1996

Atlantic City,NJ
Charleston, WV
Charlotte-Gastonia, NC
Cincinnati-Hamilton, OH-KY
Cleveland-Akron-Lorain, OH
Dallas-Fort Worth, TX
Dayton-Springfield, OH
Detroit-Ann Arbor, MI
Grand Rapids, MI
Greensboro-Winston Salem-High Point, NC
Huntington-Ashland, WV-KY
Kewaunee Co, WI
Knox & Lincoln Cos, ME
Lewiston-Auburn, ME
Louisville, KY-IN
Manitowoc Co, WI
Miami-Fort Lauderdale-W.Palm Beach, FL
Monterey Bay, CA
Muskegon, MI
Nashville, TN
Parkersburg, WV
Phoenix, AZ
Pittsburgh-Beaver Valley, PA
Portland, ME
Raleigh-Durham, NC
Reading, PA
Richmond, VA
Salt Lake City, UT
San Francisco-Bay Area, CA
Santa Barbara-Santa Maria-Lompoc, CA
Sheboygan, WI
St. Louis, MO-IL
Toledo, OH

MARGINAL

Ozone standard must be met by 1993

Albany-Schenectady-Troy, NY
Allentown-Bethlehem-Easton, PA-NJ
Altoona, PA
Birmingham, AL
Buffalo-Niagara Falls, NY
Canton, OH
Columbus, OH
Door Co, WI
Edmonson Co, KY
Erie, PA
Essex Co (Whiteface Mtn), NY
Evansville, IN
Greenbrier Co, WV
Hancock & Waldo Cos, ME
Harrisburg-Lebanon-Carlisle, PA
Indianapolis, IN
Jefferson Co, NY
Jersey Co, IL
Johnstown, PA
Kent and Queen Anne's Cos, MD
Knoxville, TN
Lake Charles, LA
Lancaster, PA
Lexington-Fayette, KY
Manchester, NH
Memphis, TN
Norfolk-Virginia Beach-Newport News, VA
Owensboro, KY
Paducah, KY
Portland-Vancouver,OR-WA
Poughkeepsie, NY
Reno, NV
Scranton-Wilkes-Barre, PA
Seattle-Tacoma, WA
Smyth Co, VA (White Top Mtn)
South Bend-Elkhart, IN
Sussex Co, DE
Tampa-St.Petersburg-Clearwater, FL
Walworth Co,WI
York, PA
Youngstown-Warren-Sharon, OH-PA

(Table current as of April, 1993)

Carbon Monoxide Nonattinment Areas

State	City/area
Alaska	Anchorage area Fairbanks North Star
Arizona	Phoenix
California	Chico Fresno Lake Tahoe-South Shore Los Angeles South Coast Air Basin* Modesto Sacramento San Diego San Francisco-Oakland-San Jose Stockton
Colorado	Colorado Springs Denver-Boulder Fort Collins Longmont
Connecticut	Hartford-New Britain-Middletown
District of Columbia	Washington, D.C. D.C. Area, Maryland, Virginia
Massachusetts	Boston
Maryland	Baltimore Washington, D.C. area-Maryland, DC, Virginia
Minnesota	Duluth Minneapolis-St.Paul
Montana	Missoula
North Carolina	Raleigh-Durham Winston-Salem
New Jersey	New York Metropolitan area - Connecticut, New York, New Jersey Camden-Philadelphia, Pennsylvania
New Mexico	Albuquerque
Nevada	Las Vegas Reno
New York	New York metropolitan area-New York, Long Island, New Jersey, Connecticut Syracuse
Ohio	Cleveland
Oregon	Grant's Pass Klamath Falls Medford Portland-Vancouver Washington
Pennsylvania	Philadelphia-Camden, New Jersey
Tennesee	Memphis
Texas	El Paso
Utah	Ogden Provo-Orem
Virginia	Washington, D.C. metropolitan area-Virginia, D.C, Maryland
Washington	Vancouver, Washington-Portland, Oregon Seattle-Tacoma Spokane

*Los Angeles- South Coast Air Basin is the only carbon monoxide nonattainment area classified as "serious", all others are classified as "moderate". All areas listed as "moderate" must meet the CO standard by December, 1995. The "serious" area must meet the CO standard by December, 2000.

Particulate (PM-10) Nonattainment Areas

MODERATE

Areas must meet PM-10 standards by December 31, 1994

Alaska	Anchorage, Juneau
Arizona	Santa Cruz, Pima, Maricopa, Pinal and Gila counties; Yuma Paul's Spur, Nogales
California	Inyo, San Bernadino, Kern, Mono, Stanislaus, Madera, Riverside (eastern part), San Bernardino (part) counties
Colorado	Archuleta, Adams, Denver, Boulder, San Miguel, Prowers, Pitkin, Fremont counties
Idaho	Ada (Boise), Shoshone, Bannock, Power (Pocatello), Bonner counties
Illinois	Cook (Chicago), LaSalle, Oglesby, Madison counties
Indiana	Lake (Gary, Hammond, East Chicago) county
Maine	Arostook (Presque Isle) county
Michigan	Wayne (Detroit) county
Minnesota	Ramsey, Olmstead counties
Montana	Flathead, Lincoln, Lake Missoula, Libbey, Rosebud, Silver Bow, Butte counties
Nevada	Washoe (Reno) county
New Mexico	Dona Ana county
Ohio	Cuyahoga (Cleveland), Jefferson (Steubenville) counties
Oregon	Jackson (Ashland-Medford), Josephine (Grants Pass), Klamath Falls, Lane (Eugene), Union (LaGrande) counties
Pennsylvania	Alleghery (includes Clairton) county Liberty-Lincoln-Portview-Glassport boroughs-Clairton
Texas	El Paso county
Utah	Salt Lake (Salt Lake City), Utah County
Washington	King (Seattle), Pierce (Tacoma), Spokane, Yakima, Thurston (Olympia, Tumwater), Walla Walla counties
West Virginia	Brooke (near WV border at Steubenville) county
Wyoming	Sheridan county

SERIOUS

Areas must meet PM-10 standards by December 31, 2001

California	San Joaquin Valley, Owens Valley, South Coast Air Basin, Coachella Valley
Nevada	Las Vegas

State and Territorial Air Pollution Control Agencies

Alabama Department of Environmental Management
Air Division
1751 Dickenson Drive
Montgomery AL 36130
(205) 271-7861

Alaska Department of Environmental Conservation
Air Quality Management Program
3220 Hospital Drive, P.O. Box 0
Juneau AL 99811-1800
(907) 465-5100

American Samoa
Environmental Quality Commission
Governor's Office
Pago Pago,
American Samoa 96799
011-(684) 633-4116

Arizona Department of Environmental Quality
Office of Air Quality
P.O. Box 600
Phoenix AZ 85001-0600
(602) 257-2308

Arkansas Department of Pollution Control and Ecology
Air Division
8001 National Drive,
P.O. Box 9583
Little Rock AR 72209
(501) 562-7444

Secretary of Environmental Affairs
California Air Resources Board
P.O. Box 2815
Sacramento CA 95812
(916) 445-4383

Colorado Department of Health
Air Pollution Control Division
4210 E 11th Avenue
Denver CO 80220
(303) 331-8500

Connecticut Department of Environmental Protection
Bureau of Air Management
165 Capitol Avenue
Hartford CT 06106
(203) 566-2506

Department of Natural Resources & Environmental Control
Division of Air and Waste Management
89 Kings Highway, P.O. Box 1401
Dover DE 19903
(302) 739-4791

District of Columbia
Air Quality Control and Monitoring Branch
2100 Martin Luther King Ave, SE
Washington DC 20020
(202) 404-1120

Florida Department of Environmental Regulation
Air Resources Management
2600 Blair Stone Road
Tallahassee FL 32399-2400
(904) 488-1344

Georgia Department of Natural Resources
Environmental Protection Division
205 Butler Street, SE
Atlanta GA 30344
(404) 656-6900

Guam Environmental Protection Agency
Complex Unit D-107
130 Rojas Street
Harmon, Guam 96911
011-(671) 646-8863

Hawaii State Department of Health
Environmental Management Division
Air Pollution Section
1270 Queen Emma St., Suite 900
Honolulu HI 96813
(808) 586-4019

Idaho Division of Environmental Quality
Air Quality Bureau
1410 North Hilton
Boise ID 83706
(208) 334-5898

Illinois Environmental Protection Agency
Division of Air Pollution Control
2200 Churchill Road
P.O. Box 19276
Springfield IL 62794-9276
(217) 782-7326

Indiana Department of Environmental Management
Air Pollution Control Board
105 S. Meridian Street
P.O. Box 6015
Indianapolis IN 46206-6015
(317) 232-8384

Iowa Department of Natural Resources
Air Quality Section
Henry A. Wallace Building, 900 E. Grand St.
Des Moines IA 50319
(515) 281-8852

Kansas Department of Health and Environment
Bureau of Air and Waste Management
Forbes Field, Building 740
Topeka KS 66620
(913) 296-1593

Kentucky Department for Environmental Protection
Division of Air Quality
316 St. Clair Mall
Frankfort KY 40601
(502) 564-3382

Louisiana Department of Environmental Quality
Office of Air Quality and Radiation Protection
Air Quality Division, P.O. Box 82135
Baton Rouge LA 70884-2135
(504) 765-0110

Maine Department of Environmental Protection
Bureau of Air Quality Control
State House, Station 17
Augusta ME 04333
(207) 289-2437

Maryland Department of the Environment
Air Management Administration
2500 Broening Highway
Baltimore MD 21224
(301) 631-3255

Massachusetts Department of Environmental Protection
Division of Air Quality Control
One Winter Street, 8th Floor
Boston MA 02108
(617) 292-5593

Michigan Department of Natural Resources
Air Quality Division
P.O. Box 30028
Lansing MI 48909
(517) 373-7023

Minnesota Pollution Control Agency
Air Quality Division
520 Lafayette Road
Saint Paul MN 55155
(612) 296-7331

Mississippi Department of Environmental Quality
Air Division, Office of Pollution Control
P.O. Box 10385
Jackson, MS 39289
(601) 961-5171

Missouri Department of Natural Resources
Division of Environmental Quality
Air Pollution Control
P.O. Box 176
Jefferson City MO 65102
(314) 751-4817

Montana Department of Health and Environmental Science
Air Quality Bureau
Cogswell Building, Room A116
Helena, MT 59620
(406) 444-3454

Nebraska Department of Environmental Control
Air Quality Division
P.O. Box 98922
Lincoln NE 68509-8922
(402) 471-2189

Nevada Division of Environmental Protection
Bureau of Air Quality
123 West Nye Lane
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New Hampshire Department of Environmental Services
Air Resources Division
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New Jersey Department of Environmental Protection
Division of Environmental Quality
Air Program
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Air Quality Service
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Oregon Deptartment of Environmental Quality
Air Quality Control Division
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Portland OR 97204
(503) 229-5287

Pennsylvania Deptartment of Environmental Resources
Bureau of Air Quality Control
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Harrisburg PA 17105-2357
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Puerto Rico Environmental Quality Board
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Hato Rey PR 00917
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Rhode Island Department of Environmental Mgmt.
Division of Air and Hazardous Materials
291 Promenade Street
Providence RI 02908-5767
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South Carolina Department of Health and Environmental Control
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Columbus SC 29201
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South Dakota Department of Environment and Natural Resources
Air Program
523 East Capitol Avenue
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Tennessee Department of Environment and Conservation
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Richmond VA 23240
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Region 2
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26 Federal Plaza
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(212) 264-2301

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Air, Radiation and Toxics Division
(3AT00)
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Philadelphia PA 19107
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Chicago IL 60604
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U.S. EPA - Region 8
999 18th Street, Suite 500
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(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

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The Plain English Guide to the Clean Air Act

A project of the Office of Policy Analysis and Review
Office of Air and Radiation
Rob Brenner, Director
Author and project director: Myra Karstadt, Office of Solid Waste
Editor: Brian Callaghan, Office of the Assistant Administrator for Air and Radiation
Photography consultant: S.C. Delaney, Office of Communication, Education and Public Affairs
Project coordination: Jeff Clark, Office of Air Quality Planning and Standards, Office of Air and Radiation

ISBN 0-16-036283-0

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISBN 0-16-036283-0

RESOLUTION

NO. 93-62

POLICY FOR REGULATION OF DISCHARGE OF MUNICIPAL SOLID WASTE

JUNE 1993

STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 93-62

POLICY FOR REGULATION OF DISCHARGES OF MUNICIPAL SOLID WASTE

WHEREAS:

1. **Water quality protection**–The State Water Resources Control Board (**State Water Board**) and each Regional Water Quality Control Board (**Regional Water Board**) are the state agencies with primary responsibility for the coordination and control of water quality (California Water Code Section 13001, "WC §13001");

2. **State Policy for Water Quality Control**–The State Water Board is authorized to adopt State Policy For Water Quality Control which may consist of or contain "...principles and guidelines deemed essential by the state board for water quality control" (Authority: WC §§1058, 13140, 13142);

3. **State agency compliance**–All State agencies shall comply with State Policy For Water Quality Control regarding any activities that could affect water quality (WC §13146);

4. **Waste Discharge Requirements**–Regional Water Boards regulate discharges of waste that could affect the quality of waters of the state, including discharges of solid waste to land, through the issuance of waste discharge requirements (WC §13263);

5. **Solid waste disposal**–The State Water Board is directed to classify wastes according to threat to water quality and to classify waste disposal sites according to ability to protect water quality (WC §13172);

6. **Chapter 15**–The State Water Board promulgated regulations, codified in Chapter 15 of Division 3 of Title 23 of the California Code of Regulations (23 CCR §§2510-2601, "**Chapter 15**"), governing discharges of waste to land. These regulations:

   a. Contain classification criteria for wastes and for disposal sites;

   b. Prescribe minimum standards for the siting, design, construction, monitoring, and closure of waste management units;

7. **Federal authority**–The federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 USC §6901, *et seq*, "**SWDA**"), authorizes development of nationwide standards for disposal sites for municipal solid waste [MSW], including criteria for sanitary landfills (SWDA §§1007, 4004, 42 USC §§6907, 6944);

8. **Federal MSW regulations**–On October 9, 1991, the United States Environmental Protection Agency (**USEPA**) promulgated regulations that apply, in California, to dischargers who own or operate landfills which accept municipal solid waste on or after October 9, 1991, (**MSW landfills**), regardless of whether or not a permit is issued (Title 40, Code of Federal Regulations [**CFR**], Parts 257 and 258, "**federal MSW regulations**"). The majority of the federal MSW regulations become effective on what is hereinafter referred to as the "**Federal Deadline**" [40 CFR §258.1(e)], currently October 9, 1993;

9. **States required to apply federal MSW regulations**–Each state must "...adopt and implement a permit program or other system of prior approval and conditions to assure that each...[MSW landfill]...within such state...will comply with the...[federal MSW landfill regulations]." State regulations promulgated to satisfy this requirement are subject to approval by USEPA. (SWDA §§4003, 4005, 42 USC §§6943, 6945);

10. **Approved state's authority**–The permitting authority in an "approved state" may approve engineered alternatives to certain prescriptive standards contained in the federal MSW regulations, provided that the alternative meets specified conditions and performance standards (40 CFR 256.21);

11. **State application**–The State Water Board and the Integrated Waste Management Board submitted an application for program approval to the USEPA on February 1, 1993;

12. **Chapter 15 deficiencies**–The State Water Board's Chapter 15 regulations are comparable to the federal MSW regulations. Nevertheless, the USEPA has identified several areas of Chapter 15 which are not adequate to ensure compliance with

certain provisions of the federal MSW regulations, as summarized in **Attachment I**;

13. **Rulemaking to amend Chapter 15**–There is insufficient time, prior to October 9, 1993, for the State Water Board to amend Chapter 15 to ensure complete consistency with the federal MSW regulations and subsequently for the USEPA to carry out a review of the revised chapter and to render a decision approving California's permit program;

14. **Composite liner(s) needed**–Solid Waste Assessment Test Reports, submitted to Regional Water Boards pursuant to WC §13273, have shown that releases of leachate and gas from MSW landfills that are unlined are likely to degrade the quality of underlying ground water. Research on liner systems for landfills indicates that (a) single clay liners will only delay, rather than preclude, the onset of leachate leakage, and (b) the use of composite liners represents the most effective approach for reliably containing leachate and landfill gas;

15. **Lack of compliance with Chapter 15**–WDRs for many MSW landfills have not been revised to meet the most recent Chapter 15 amendments;

16. **CEQA**–Adoption of this policy is categorically exempt from the provisions of the California Environmental Quality Act (Division 13, commencing with §21000, of the Public Resources Code, "CEQA") because it is an action by a regulatory agency for the protection of natural resources, within the meaning of §15307 of the *Guidelines For Implementation of California Environmental Quality Act* in Title 14 of the California Code of Regulations;

17. **Public notice**–Notice of the State Water Board's proposal to adopt a State Policy for Water Quality Control regarding Regulation of Discharges of Municipal Solid Waste was published on March 31, 1993, and a public hearing on the matter was held on June 1, 1993; and

18. **Reference**—This Policy implements, interprets, or makes specific the following Water Code Sections: §13142, §13160, §13163, and §13172.

THEREFORE BE IT RESOLVED:

I. Implementation of the Chapter 15 and federal MSW regulations:

A. **WDR revision**—In order to insure compliance with SWDA §§4003, 4005 (42 USC §§6943, 6945), each Regional Water Board shall henceforth implement in waste discharge requirements for discharges at MSW landfills, both the Chapter 15 regulations and those applicable provisions of the federal MSW regulations that are necessary to protect water quality, particularly the containment provisions stipulated in Section III of this Policy and the provisions identified in Attachment I to this Policy, and shall revise existing waste discharge requirements to accomplish this according to the schedule provided in Section II of this Policy;

B. **Alternatives limited**—The Regional Water Board shall not rely upon any exemption or alternative allowed by Chapter 15 if such an exemption or alternative would not be allowed under the federal MSW regulations, nor shall the Regional Water Board waive waste discharge requirements for the discharge of municipal solid waste at landfills;

C. **Applicability in the absence of useable waters**—Although all other provisions of this Policy would continue to apply, the Regional Water Board shall have the discretion to prescribe requirements for containment systems and water quality monitoring systems that are less stringent than the design and construction standards in this Policy, in the federal MSW regulations, and in Chapter 15 if the Regional Water Board finds that the containment systems satisfy the performance standard for liners in the federal MSW regulations [40 CFR §§258.40(a)(1) and (c)], that the prerequisite for an exemption from ground water monitoring in the federal MSW regulations is satisfied [40 CFR §258.50(b)], and that either of the following two conditions is satisfied:

1. A hydrogeologic investigation shows that:

   a. There is no aquifer (i.e., a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of ground water to wells or springs) underlying the facility property; and

   b. It is not reasonably foreseeable that fluids—including leachate and landfill gas—migrating from the landfill could reach any aquifer or surface water body in the ground water basin within which the landfill is located; or

2. The ground water in the basin underlying the facility has no beneficial uses and a hydrogeologic investigation shows that it is not reasonably foreseeable that fluids—including leachate and landfill gas—migrating from the landfill could reach any aquifer or surface water body having beneficial uses.

II. Implementation schedule:

A. **MSW landfills**–By the Federal Deadline (e.g., October 9, 1993), each Regional Water Board shall amend the waste discharge requirements for discharges of waste at all MSW landfills in its region (including discharges to any area outside the actual waste boundaries of an MSW landfill as they exist on that date ["**lateral expansion**" hereinafter]), to require persons who own or operate such landfills to:

1. Except for the ground water monitoring and corrective action requirements under 40 CFR §§258.50-258.58, comply with all applicable portions of the federal MSW regulations by the Federal Deadline; and

2. Achieve full compliance with Chapter 15 and with the federal ground water monitoring and corrective action requirements under 40 CFR §§258.50-258.58 as follows:

   a. For all MSW landfills that are less than one mile from a drinking water intake (surface or subsurface), by no later than October 9, 1994; and

   b. For all other MSW landfills that have accepted waste prior to the effective date of this Policy, by no later than October 9, 1995;

B. **Proposed MSW landfills**–As of the date of the Federal Deadline, waste discharge requirements for the discharge of waste at all MSW landfills that have not accepted waste as of that date shall ensure full compliance both with Chapter 15 and with the federal MSW regulations prior to the discharge of waste to that landfill.

III. Containment–As of the Federal Deadline, discharges of waste to either an MSW landfill that has not received waste as of that date or to a lateral expansion of an MSW landfill unit are prohibited unless the discharge is to an area equipped with a containment system which is constructed in accordance with the standard of the industry and which meets the following additional requirements for both liners and leachate collection systems:

A. **Standards for liners**

1. **Post-Federal Deadline construction**–Except as provided in either §III.A.3. (for steep sideslopes) or §III.A.2. (for new discharges to pre-existing liners), after the Federal Deadline, all containment systems shall include a composite liner that consists of an upper synthetic flexible membrane component (**Synthetic Liner**) and a lower component of soil, and that either:

   a. **Prescriptive Design**:

      i. **Upper component**–Has a Synthetic Liner at least 40-mils thick (or at least 60-mils thick if of high density polyethylene) that is installed in direct and uniform contact with the underlying compacted soil component described in paragraph III.A.1.a.ii.; and

      ii. **Lower component**–Has a layer of compacted soil that is at least two feet thick and that has an hydraulic conductivity of no more than 1×10^{-7} cm/sec (0.1 feet/year); or

   b. **Alternative design**–Satisfies the performance criteria contained in 40 CFR §§258.40(a)(1) and (c), and satisfies the criteria for an engineered alternative to the above Prescriptive Design [as provided by 23 CCR §2510(b)], where the performance of the alternative composite liner's components, in combination, equal or exceed the waste containment capability of the Prescriptive Design;

2. **New discharges to liners constructed prior to the Federal Deadline**–Except as provided in §III.A.3. (for steep sideslopes), containment systems that will begin to accept municipal solid waste after the Federal Deadline, but which have been constructed prior to the Federal Deadline, are not required to meet the provisions of §III.A.1. if the containment system includes a composite liner that:

   a. **Prescriptive Design**–Features as its uppermost component a Synthetic Liner at least 40-mils thick (or at least 60-mils if high density polyethylene) that is installed in direct and uniform contact with the underlying materials; and

   b. **Performance**–Meets the performance criteria contained in 40 CFR §§258.40(a)(1) and (c);

3. **Steep sideslopes**–Containment systems installed in those portions of an MSW landfill where an engineering analysis shows, and the Regional Water Board finds, that sideslopes are too steep to permit construction of a stable composite liner that meets the prescriptive standards contained in §§III.A.1 or 2. shall include an alternative liner that meets the performance criteria

contained in 40 CFR §§258.40(a)(1) and (c) and that either:

a. Is a composite system and includes as its uppermost component a Synthetic Liner at least 40-mils thick (or at least 60-mils if high density polyethylene) that is installed in direct and uniform contact with the underlying materials; or

b. Is not a composite system, but includes a Synthetic Liner at least 60-mils thick (or at least 80-mils if of high density polyethylene) that is installed in direct and uniform contact with the underlying materials; and

B. **Standards for leachate collection**–Include a leachate collection and removal system which conveys to a sump (or other appropriate collection area lined in accordance with §III.A.) all leachate which reaches the liner, and which does not rely upon unlined or clay-lined areas for such conveyance.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 17, 1993.

Maureen Marchè
Administrative Assistant to the Board

ATTACHMENT I

To Resolution No. 93-62

Pursuant to §I.A., in writing or revising the waste discharge requirements for MSW landfills, Regional Water Boards shall implement those portions of the following sections of the federal MSW regulations that either are more stringent than, or do not exist within, Chapter 15.

- **Floodplains**–40 CFR §§258.11 and 258.16
- **Wetlands**–40 CFR §258.12
- **Unstable areas**–40 CFR §§258.15 and 258.16
- **Run-on/Run-off control systems**—40 CFR §258.26
- **Liquids acceptance**–40 CFR §§258.28 [esp. §(a)(2)]
- **Design Criteria**—40 CFR §258.40, according to the provisions of Section III
- **Well/piezometer performance**–40 CFR §258.51
- **Ground-water sampling/analysis**—40 CFR §258.53
- **Monitoring Parameters**–40 CFR §258.54 and Appendix I to Part 258
- **Constituents of Concern**–40 CFR §258.55 and Appendix II to Part 258
- **Response to a release**–40 CFR §§258.55 [esp. §(g)(1)(ii, iii)]
- **Establishing corrective action measures**–40 CFR §§258.56 [esp. §§(c and d)] and 258.57
- **Ending corrective action program**–40 CFR §258.58 [esp. §(e)]
- **Closure/post-closure**–40 CFR §§258.60-258.61 [esp. §§258.60(a-g)]
- **Deed notation**–40 CFR §258.60(i)
- **Ending post-closure**–40 CFR §258.61 [esp. §§(a and b)]
- **Corrective action financial assurance**—40 CFR §258.73

STATE WATER RESOURCES CONTROL BOARD

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Water Quality Information: (916) 657-0687

Clean Water Programs Information: (916) 739-4400
Water Rights Information: (916) 657-2170

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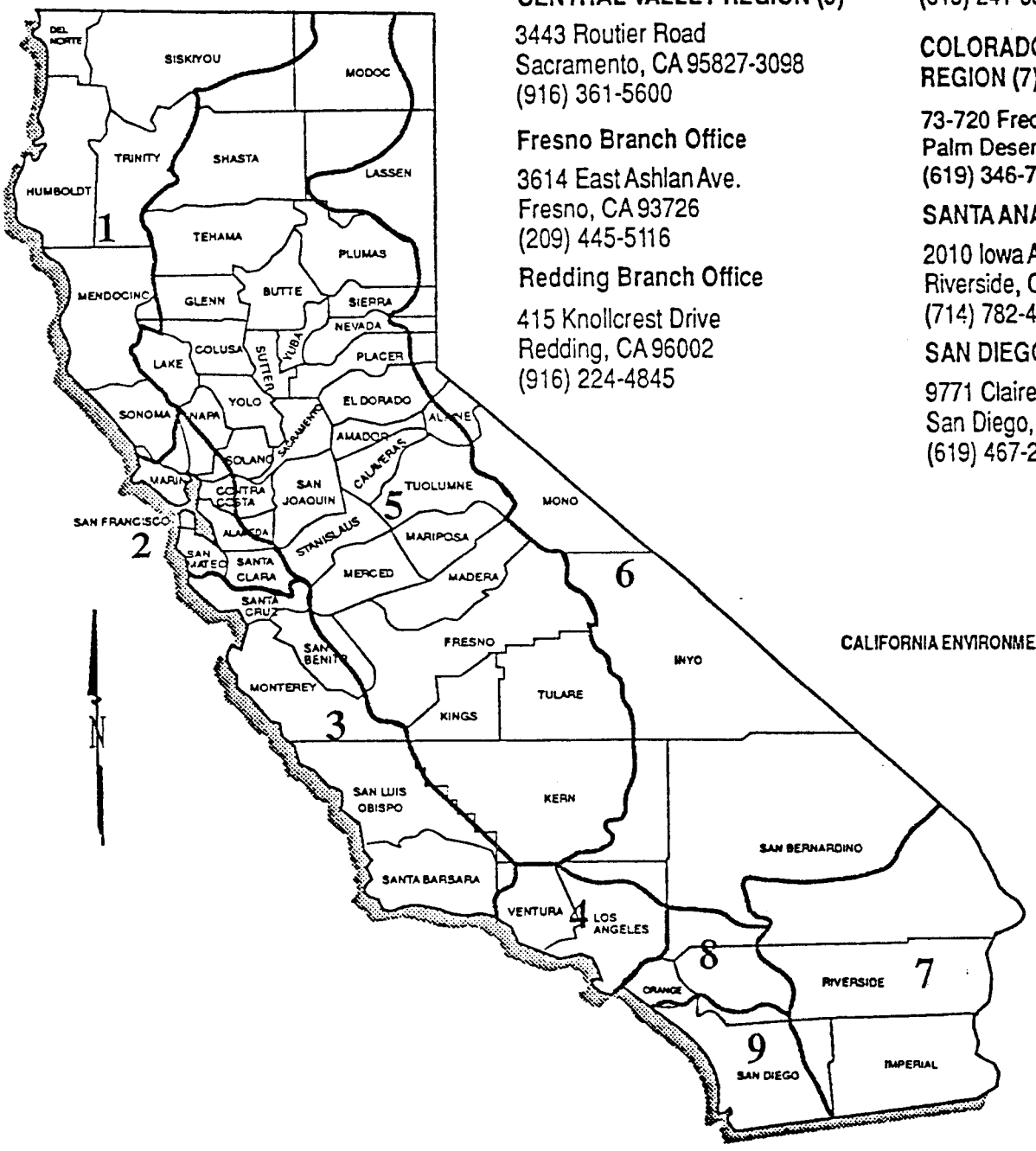
(619) 467-2952



STATE OF CALIFORNIA
Pete Wilson, Governor

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
James M. Strock, Secretary

5/22/92

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950328-4

FROM: STAFFORD, RONALD	TO: DIXON
TITLE: SENATOR	TITLE: CHAIRMAN
ORGANIZATION: NEW YORK STATE LEGISLATURE	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: PLATTSBURGH AFB, MCGUIRE AFB	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL	✓			COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR./CONGRESSIONAL LIAISON		(✓)		COMMISSIONER STEELE			
DIR./COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXECUTIVE SECRETARIAT				ARMY TEAM LEADER			
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER		X	
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
DIR./INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

(✓)	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

REQUESTING THAT DBCRC CONSIDER RE-DIRECTING CLOSURE OF PLATTSBURGH BECAUSE OF PROBLEMS WITH MCGUIRE AFB. COPY OF "DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE REALIGNMENT OF MCGUIRE AFB" INCLUDED.

Due Date: 950330	Routing Date: 950328	Date Originated: 950323	Mail Date:

THE LEGISLATURE
STATE OF NEW YORK
ALBANY

March 23, 1995

Please refer to this number when responding 950328-4

Honorable Alan Dixon, Chairman
Defense Base Closure and
Alignment Commission
1700 North Moore Street, Suite 1425
Arlington, Virginia 22209

Dear Chairman Dixon:

The Plattsburgh Intermunicipal Development Council has contacted you requesting that the Commission review its decision for closure of Plattsburgh Air Force Base. We fully support and further request review of this decision by holding a hearing at the Commission's earliest possible convenience.

As we are sure you are aware, the previous Commission selected Plattsburgh Air Force Base for closure, in direct contravention of Air Force and Department of Defense direction. This action was taken by that Commission instead of the Air Force's favored action, McGuire Air Force Base realignment. The Air Force's recommendation was to make Plattsburgh the east coast base for an Air Mobility Wing mission adding 36 additional C-141s and 19 KC-10s.

The 1993 Air Force recommendation concluded that Plattsburgh AFB had the environment, airspace and surplus facilities to significantly conform to new missions and an increase in aircraft. These critical components were not and are not apparent at McGuire AFB, as is made abundantly clear by a review of the Draft Environmental Impact Statement prepared by the Air Force for its McGuire project (attached). As a matter of fact, Air Force Chief of Staff General Ronald Fogelman, then Commander of the Air Mobility Command, urged the Commission to remove Plattsburgh AFB from the final list for closure at the 1993 hearings and his authority in this subject was ignored.

It is our position that the events leading up to the Commission's 1993 decision to close Plattsburgh AFB deserve a re-direct in the form of a hearing. The enormous amount of proof offered in 1993 by the citizens of New York still supports the essential need for an active duty Air Force mission in the Northeast at the Air Force Base in Plattsburgh.

It is our belief that a hearing is essential and ask that our request for a re-direct will be honored as soon as possible.

As always, our offices are available to you for any further information you find necessary.

Sincerely,

Ronald Stafford
Senator

Chris Ortloff
Member of Assembly

James King
Member of Assembly

enclosure:
"Review of DEIS for the Realignment of MAFB"

Review of

Draft Environmental Impact Statement

for the

Realignment of McGuire Air Force Base

With Respect to Issues Raised in

Plattsburgh Intermunicipal Development Council
Request to Defense Base Closure and Realignment Commission
for
Re-Direct Hearing on the Decision
To Close Plattsburgh Air Force Base

Prepared by Assemblyman Chris Ortloff
March, 1995

Review of

Draft Environmental Impact Statement

for the

Realignment of McGuire Air Force Base

With Respect to Issues Raised in

Plattsburgh Intermunicipal Development Council
Request to Defense Base Closure and Realignment Commission
for
Re-Direct Hearing on the Decision
To Close Plattsburgh Air Force Base

Summary

The Air Force Draft Environmental Impact Statement, published in March, 1994, discusses and raises several significant issues of fact relevant to a redirect hearing on this matter. While the DEIS itself is moot, its process having been completed, a review thereof is nonetheless pertinent and useful in illuminating these issues:

1. environmental constraints which further explain and define the parameters which have prevented the Air Force from complying with the full realignment mandated by law (namely an Air Mobility Wing which includes KC-135 aircraft as prescribed by the Force Structure Plan and as ordered by DBCRC resolution on June 24, 1993). The empirical fact of these real-world constraints so affirmatively asserted by the Air Force in the DEIS lends support to ***PIDC's*** claim that the DBCRC resolution did not comply with the Force Structure Plan as required by law. It did not comply because *it could not comply*; no evidence of compliance was presented because *such evidence does not exist.*

2. significant adverse environmental impacts (even with a limited realignment) which would not exist at Plattsburgh AFB under the realignment originally recommended by the Department of Defense, which may help prove ***PIDC's*** claim that evidence did not support the DBCRC resolution with respect to the final criteria.

3. environmental impacts of the proposed realignment which conflict with federal and New Jersey environmental quality mandates and may prevent or delay the realignment and/or operation of realigned aircraft, negatively impacting the national defense capability immediately;

Not surprisingly, the Air Force generally asserts that the environmental impacts identified

can and will be mitigated, but in two specific areas of concern, no mitigating measures are identified. In one case, that of ozone non-attainment, mitigation strategies are promised in a forthcoming separate report, although the operational problems arising therefrom will commence immediately and constrain the operation of KC-10 aircraft arriving at McGuire in mid-1994. In the other case, that of air traffic congestion and resulting inability to carry out the mission of the Air Mobility Wing, no mitigating measures are suggested or claimed. In other words, the Air Force essentially reasserts its prior (1993) position on air traffic congestion (that McGuire AFB was unsuitable for the Air Mobility Wing mission) but in greater detail and specificity.

This review is organized following the organization of the DEIS and taking up issues in the order in which they are found therein, in which they may be directly compared and utilized by ***DBCRC*** *in this matter.*

I. Review of the DEIS

From the Executive Summary

(p. xv) The KC-10s would add volatile organic compounds ... precursors to ozone (for which the McGuire AFB area has been designated as in "severe" nonattainment). The effect ... is largely unknown. However, since the region's attainment status is so poor, all new stationary and mobile sources (however minor) must be evaluated to see if McGuire AFB would be in conformity with New Jersey's state implementation plan (SIP) for ozone.

(p. xvii) ... increased water use associated with the realignment and other force structure action would contribute to the decline of the water level of the deep aquifer supplying water for McGuire AFB.

(p. xvii) Construction ... would eliminate (12.64 acres of wetland). Any development in wetlands must be authorized by the state of New Jersey and the New Jersey Pinelands Commission.

(p. xviii) ... the endangered bald eagle has been identified ... as a potential aircraft strike hazard.

(p. xix) Concerns exist relative to congestion of air traffic. The congestion in these areas could cause delays in Air Force training missions or in commercial flights.

From Section 1: Purpose of and Need for the Action

Of interest here is the repeated affirmation in the DEIS that a "no action" option, normally required in every environmental review process, is not possible here because the Defense Base Closure and Realignment Act exempted base realignments from this requirement. However, the Air Force indulges in a deliberate "no action" option by failing to include KC-135 aircraft in the realignment. Thus, a significant portion of the realignment mandated by the DBCRC for McGuire AFB is simply ignored. This is clearly in non-compliance with the Force Structure Plan, but

more to the point, if the Air Force can indulge a "no action" option at its pleasure, why should the statement that it is *prohibited* be accepted at face value?

As one studies the DEIS, a number of practical environmental constraints are described which help illuminate more clearly just why it was *never possible for McGuire AFB and the region to accommodate the full Air Mobility Wing called for in the Force Structure Plan.* Obstacles to McGuire presented the DBCRC hearing process were essentially space and facility limitations, which the DBCRC presumed to "overcome" by accounting for the cost of additional ramp and fuel system construction. This DEIS helps to show how these constraints also have an environmental component, the mitigation costs of which were not accounted for in the DBCRC recommendation. In other words, the ability of McGuire AFB to accommodate the full Air Mobility Wing is precluded in a practical way by environmental constraints that can't be waved away with a magic wand the same way putative construction costs were dismissed by DBCRC '93.

(1-1) Provisions of the Defense Base Closure and Realignment Act preclude the examination of any alternatives to the realignment ... "no action" is not an alternative.

(1-3) ... the Defense Base Closure and Realignment Act ... modifies the application of NEPA to the extent that the EIS need not consider:

- The need (for the action)
- The need for transferring functions (from one installation to another)
- Alternative military installations to those selected.

From Section 2: Description of the Proposed Action and Alternatives

(2-1) This section describes those actions ... mandated by the Defense Base Closure and Realignment Commission[1]

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[1] In fact this section ***does not*** describe the action mandated by the DBCRC. The action mandated by the DBCRC is defined by the following language in two resolutions adopted by the DBCRC on June 24, 1993, to wit: ***"Move the 19 KC-10 aircraft from Barksdale Air Force Base to McGuire Air Force Base. Move the requisite number of KC-135s to establish the East Coast Mobility Base at McGuire."*** *(p. 132, l. 9-12, DBCRC hearing record)* and ***"Close Plattsburgh Air Force Base and transfer the KC-135s to McGuire Air Force Base."*** *(p. 200, l.15-16).* During a commission discussion on whether closing Plattsburgh would leave enough tankers in the northeast, the resulting scenario was described by Mr. DiCamillo thus: ***"with McGuire as the mobility base, that essentially takes the same tankers that would have been at Plattsburgh under the mobility base and places it just a little bit further south ..."*** *(p.195 l.16-19)* However, ***none*** of Plattsburgh's KC-135s are being transferred to McGuire, nor are any other KC-135s being transferred to McGuire. Plattsburgh's KC-135s are mostly going "a little bit further ***west***" to Grand Forks AFB, North Dakota. The action described in the DEIS is a "no action" with respect to the mandate to move "the requisite number" of KC-135s formerly at Plattsburgh to McGuire. Thus the "no action" option is being used as a shield against proper environmental review when it is convenient for the Air Force to do so, while the Air Force actually ***exercises*** the supposedly prohibited "no

2.1.1 Realignment

(2-1) Provisions of the Defense Base Closure and Realignment Act of 1990 require implementation of the realignment and preclude ... the no-action alternative.

2.2.2 Alternatives Considered but Eliminated from Detailed Analysis

2.2.2.1 Realign Without Construction Program

(2-9) When the first KC-10 aircraft arrive at McGuire AFB from Barksdale AFB, none of the facilities listed in Section 2.2.1 will be available. During the construction phase, required maintenance for the KC-10s will be conducted while the aircraft are sitting outside on the ramp. If an aircraft develops a fuel leak, repairs will have to be delayed until the temperature remains above 50^0 F for an extended period of time. Other maintenance, such as hydraulic work on struts and No. 2 engine changes, cannot be done on the ramp.

Such operations can be made to work temporarily, but the mission cannot be sustained under these conditions.[2]

2.2.3 Alternative Means to Implement the Realignment Action

(2-11) No alternative location was considered for the movement of the 19 KC-10 aircraft from Barksdale AFB.[3]

Table 2.3

(2-14) 45% increase in jet fuel usage.[4]

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action" when *that* suits it.

[2] As we shall see in subsequent sections, the mission cannot be sustained under these conditions for another reason: the New Jersey state implementation plan for ozone will almost certainly require that fueling and defueling facilities, degreasing washracks, paint booths and other maintenance facilities perform at *state of the art* emission-control levels. While such performance standards can be built into the permanent facilities listed in 2.2.1, they obviously cannot be met under temporary outdoor conditions described here. This suggests a practical difficulty of unknown proportions facing the KC-10 operations when the first ones arrive in mid-1994.

[3] Yet alternate locations were considered ***and chosen*** for the PAFB KC-135s ordered to McGuire by the DBCRC.

[4] Compare this, if possible, to the much larger "need" postulated when DBCRC claimed Plattsburgh could not supply enough fuel.

Extensive demolition would be done requiring removal and disposal of asbestos.[5]

(2-15) Increased water withdrawal would contribute to decline of water level in the deep aquifer.[6]

Increase in impervious surface of 40 acres would result in increased storm-water runoff along the flight line.[7]

Grassy old-field vegetation would be removed.[8]

(2-16) Elimination of 12.6 acres of wetlands.[9]

Elimination of habitat (for threatened species).[10]

WWII structures that are potentially eligible for the National Register will be demolished.[11]

From Section 3
Affected Environment

3.2 ENVIRONMENTAL SETTING

3.2.1.2
Air Quality

(3-4) ... the area around McGuire AFB has been designated as

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[5] No demolition would be required at PAFB.

[6] Aquifer degradation would not be a problem at PAFB.

[7] No ramp expansion would be required at PAFB and thus no adverse environmental impact.

[8] No ramp expansion would be required at PAFB and thus no adverse environmental impact.

[9] No ramp expansion would be required at PAFB and thus no adverse environmental impact.

[10] No ramp expansion would be required at PAFB and thus no adverse environmental impact.

[11] No such adverse cultural impact at PAFB. To the contrary, *closing* PAFB will result in the abandonment and resulting degradation of numerous 19th-century buildings *already on* the National Register.

nonattainment only for 0_3. The 0_3 standard has been exceeded at the monitors in the vicinity of McGuire AFB on at least four days within a three-year period.

The McGuire AFB monitoring site recorded four days in 1989, four days in 1990, and 10 days in 1991 when 0_3 concentration averages violated the primary NAAQS (0.12 ppm one-hour average); the secondary standards for 0_3 (0.08 ppm one-hour average) were exceeded on 149 days in 1990.[12]

(3-6) The largest annual VOC emissions come from aircraft operation (328.0 tons), followed by aircraft engine trim/power checks (259.6 tons).[13]

The New Jersey SIP requires that 1990 VOC and NO_x baseline source emissions for the entire state be reduced by 10% by 1996 ... This emissions reduction requirement would necessitate a change in the use or application of control technologies of some of the above-mentioned sources.[14]

3.2.5.2 Groundwater

(3-27) The deep hydrogeologic unit present at McGuire AFB is the Potomac-Raritan-Magothy aquifer system. The system is regional in extent and is the primary source for potable water supplies in the area.

The primary source of recharge to the system consists of rainfall or surface water.

Before the massive pumping that has been relatively commonplace in the region since the early 1960s, groundwater flow was primarily down gradient (south or southeast). Large pumping centers such as McGuire AFB have caused large-scale reversal of the historical

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[12] Note that compliance with the New Jersey state implementation plan is a mandate. Note also that violations are increasing over time. Somehow, the Air Force must operate the KC-10s within this mandate. The DEIS does not say how.

[13] Because of waiting time with engines running due to air traffic congestion, these emissions are larger than would be experienced at Plattsburgh AFB or any other base, and the very large increase in training time for an Air Mobility Wing would further exaggerate this adverse environmental impact in the Burlington County ozone non-attainment area.

[14] Note again that this is a mandate. The DEIS does not identify mitigating measures which can enable the Air Force to comply with this mandate.

flow path. During the period 1900-1968, groundwater levels in the system declined about 80 ft in the Fort Dix-McGuire AFB area.

In 1992 groundwater levels continued to undergo long-term decline at a rate of about 1 ft per year.[15]

The New Jersey DEPE has designated the Camden Metropolitan area, including McGuire AFB, as a critical water supply management area because of possibility of saltwater contamination in the *overpumped* Potomac-Raritan-Magothy aquifer system.

3.2.12 Air Space

We note that the entire discussion here is about existing air space requirements for the old airlift wing which are irrelevant to the DEIS. ***No discussion is presented for air space to be used by the new Air Mobility Wing.***

[15] Note: The DEIS claims that the additional pumping for the realignment is acceptable because Ft. Dix pumping declined by more than 50% after 1987. But that decline had already occurred when the USGS 1993 report documented the continued foot-per-year decline in groundwater levels.

From Section 4
Environmental Consequences

4.1 PROPOSED ACTION AND ALTERNATIVES

4.1.1 Air Resources

(4-1) ...the additional KC-10 aircraft operations would increase the annual emissions of all pollutants, except PM_{10}.

DEIS tables 4-1 and 4-2 show the critical figures for VOCs and NO_x, the ozone precursors. Those tables are summarized here:

From Table 4-1: Aircraft Emissions (tons per year)

	VOCs	NO_x
1993 Baseline total	328.0	227.6
Future total with 24 KC-10s	519.6	1,016.0
Percentage Increase	**58.4%**	**346.4%***

**Note: on page 2-13, the DEIS characterizes this as "extremely small", while on page 4-37 it characterizes it as "significant quantities (which may force) controls on other sources to compensate."*

From Table 4-2: All Emissions at McGuire AFB (tons per year)

	VOCs	NO_x
1993 Baseline Total	1,096.5	866.8
Future Total with 24 KC-10s	1,288.1	1,655.2
Percentage Increase	**17.5%**	91.0%

(4-1) All sources of ozone precursors at McGuire AFB must be controlled and minimized in order to comply with the New Jersey State Implementation Plan (SIP).[16]

(4-3) Under the worse-case scenario, *and exclusive of ozone,* the pollutant additions from the KC-10s would not result in violations of any of

[16] Note again that this is a mandate

the ambient air standards because background concentrations are far below the air quality standards for each pollutant.[17]

(4-5) The number of stationary sources of VOCs ... would increase.

Emissions of VOCs ... from ... jet fuel, gasoline, paints and degreasers ... additional aircraft fuel ... would result in additional VOC emissions.

The Air Force intends to convert completely to the use of JP-8 fuel in FY 1994. The effects of the JP-8 conversion on emissions from aircraft engine exhaust are currently unknown. Preliminary studies...indicate that emissions of all critical pollutants would *vary* within 20% of JP-4 engine exhaust emissions.[18]

(4-6) The Air Force will assess the impact (on ozone) in an analysis and determination separate from this EIS.

4.1.5 Water Resources

(4-20) Potential impacts ... include degradation of water quality (and) depletion of water supplies.

(4-21) The realignment would increase the water requirement by about 25%.

(4-22) The total withdrawal ... would not exceed the water permit amount. However, the deep aquifer that supplies the water for McGuire AFB is overpumped, and the potentiometric surface continues to drop about 1 ft a year. The realignment at McGuire AFB would increase the water withdrawal and contribute to the decline of the potentiometric level. The potential impact on groundwater level from the realignment and the proposed force structure action at McGuire AFB would be a function of the increased number of personnel and dependents moving into the area.

.... although the realignment at McGuire AFB would increase the

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[17] Emphasis added. Ozone is a critical problem ***to which this disclaimer does not apply.***

[18] Emphasis added. Lest an inference be drawn that emissions would decrease, "vary" means increase ***and*** decrease. Thus the 346.4% increase in NO_x emissions from aircraft operation predicted in Table 4-2 ***could be as high as 415%***, or could be lower. The Air Force has no idea, yet it confidently forges ahead with this serious adverse impact in an ozone non-attainment area.

current water use, the combined impact of a decrease in personnel at Fort Dix and an increase at McGuire AFB would not result in a higher water demand than that experienced before 1991.[19]

4.1.6.3 Wetlands

(4-25) The proposed expansion of the aircraft parking apron...would eliminate 93% of this (13.5-acre) wetland.

(4-26) Wetlands...would be destroyed.[20]

4.1.12 Air Space

(4-36) Air traffic in the vicinity of McGuire AFB currently is heavy. At 8,000 feet and above, the airspace is extremely congested from commercial aircraft, a condition that may lead to delays because of the need for proper aircraft spacing. Consequently, there is concern that the timing needed to properly carry out refueling training may be jeopardized during some busy portions of the day. A regularly planned rendezvous between a KC-10 and another military aircraft may be jeopardized if there are delays in the KC-10 authorization for travel in the departure region. Time constraints needed for proper training during these air refueling missions may be violated because of the commercial air traffic congestion in the departure region. The dimensions of this problem are not known[21] but are not *thought* to be insurmountable. The McGuire AFB air traffic control area comprises 14 satellite airports that serve many light civil aircraft. Additionally, the air traffic area consists of the Coyle drop zone, Navy Lakehurst drop zone, an aerobatics box, warning areas, and an Army drop restricted area. These special use

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[19] This is verified by Table 3.9 on page 3-28, and the existing permit does allow for the proposed increase, but as noted above, ***even the significantly lower pumping of 1992 was found by USGS in 1993 to be lowering the groundwater level by one foot per year***. No such potential adverse impact would occur were the Air Mobility Wing to have been located at Plattsburgh AFB.

[20] No such adverse environmental impact would occur were the Air Mobility Wing to have been located at PAFB.

[21] Some critical dimensions of the problem *are well known* to the FAA and the Air Force. In addition to two decades worth of documentation summarized in a scathing FAA letter to the DBCRC, recent developments *since* the DBCRC action shed even more light on the "dimensions of the problem:" on at least two occasions, orders to McGuire KC-135 tankers to perform *real* (not training) refueling missions for aircraft inbound from Europe were *refused* due to inability to surmount air traffic control delays McGuire aircraft regularly experience. (In both cases cited, tankers from Plattsburgh AFB accepted and promptly fulfilled the missions, enabling the inbound aircraft to make it safely to land without running out of fuel and crashing in the Atlantic.)

airspaces along with the air traffic control *wake turbulence separation criteria for heavy aircraft* may significantly limit the KC-10 local training capability.

4.22 MITIGATIVE MEASURES

4.2.1 Air Resources

(4-37) ... the significant quantities of ozone to be emitted as a result of the realignment and additional force structure action may make it necessary to place controls on *other* sources to compensate[22] ... Because the region is currently in nonattainment for ozone, the paint booths and degreasing washracks needed to support the KC-10 operations must be constructed in consultation with the New Jersey DEPE. The extensive permitting requirements of the state's "lowest achievable emission rate" program *mandate* that these new facilities employ state-of-the-art emission control technologies.[23]

4.2.11 Air Space

(4-41) No mitigative measures have been identified for operations in special use air space areas that would be utilized by the KC-10 aircraft.

4.3 ENVIRONMENTAL REGULATIONS AND PERMIT REQUIREMENTS

4.3.1 Introduction

(4-41) ... various federal statutes ... impose environmental protection and compliance *requirements*[24] upon the Air Force.

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[22] Emphasis added. Controls on other sources typically include restrictions on automobiles, required use of reformulated gasolines at higher costs, bans on backyard barbecues and gas-powered lawn mowers, as well as a myriad of restrictions on private businesses.

[23] Emphasis added. A "lowest achievable" strategy is essentially a cost-irrevelant one. Standards ***must*** be achieved, whatever the cost. Costs to achieve this will be substantially higher than construction costs for these stationary emissions sources would be at Plattsburgh AFB. They are certainly higher, by a significant margin, than estimates used by the DBCRC in concluding that there was virtually no difference in construction costs between Plattsburgh and McGuire. (See DBCRC June 24, 1993 transcript, pp. 96-104, concluding with Commissioner Byron's question "... is that the same cost at each of the facilities?" and Mr. DiCamillo's answer that "it's in the same ballpark.")

[24] Emphasis added.

(4-42) ... (also) federal law delegates enforcement or implementation authority to state or local agencies.

... construction and *operation* of the facilities necessary to carry out the realignment *must* be in compliance with the statutes, regulations and standards then in effect.[25]

4.3.2 Air Pollution

Without citing the entire text here, this detailed discussion of the interrelated impacts and mitigative measures required by the Clean Air Act is illustrative of the difficulties involved in permitting *any* new emission source. When the ozone non-attainment status of McGuire AFB is considered in this context, a general idea of the practical constraints facing the Air Force in attempting to operate the Air Mobility Wing at McGuire is gained. A thorough analysis of the combined effect of the law and this circumstance is not done by the DEIS, but if done, would more clearly expose the severity of the constraints.

(4-45) To implement a control strategy for ozone pollution ... there may be no storage of VOCs in any stationary storage tank having a maximum capacity of 10,000 gal or greater and the transfer of any VOC that has a vapor pressure or sum of partial pressure of 0.02 lb/in^2 absolute or greater at standard conditions into any receiving vessel having a maximum capacity of 2,000 gal or greater *unless the operation is equipped with control apparatus to prevent the emission of a VOC into the outdoor atmosphere.*

(4-47) The CAA established the NAAQS to protect the public from adverse effects caused by specific pollutants. For ozone, the NAAQS is set at a maximum of 0.12 ppm averaged over a one-hour period. ... this standard *must* be attained ... McGuire AFB is ranked severe or low severe and *must* meet the NAAQS standard for ozone by November 15, 2005. ... 24 KC-10s would add about 190 tons per year of VOCs and 790 tons per year of NO_x to the atmosphere (Table 4.1) The direct emissions from the proposed relocation, therefore, *exceed* the de minimis threshold and a conformity determination *must* be made.[26]

(4-48) There are no exemptions from the rule.

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[25] Emphasis added. Again, these are ***mandates***, and they apply not only to the construction project, but ***to the operation of the aircraft*** thereafter.

[26] Emphasis added.

Under the rule, the emissions from the construction of any facility that would require permitting as a new major or modified source under the New Source Review Program or the Prevention of Significant Deterioration Program are not included in the calculation of emissions for determining the direct and indirect emissions that require conformity determination. However, since the aircraft, as mobile sources, are not required to be permitted in New Jersey, *those emissions must be counted and clearly exceed the de minimis threshold set forth in the rule.*[27]

The action *may* be presumed to conform *if* McGuire AFB can clearly demonstrate that, using methods consistent with those set forth in the rule, the emissions from the proposed activities would not cause *or contribute to any* new violation of *any* standard in *any* area; interfere with the provisions in the applicable SIP; increase the frequency or severity of *any* existing violation of *any* standard in *any* area; or delay timely attainment of *any* standard or *any* required interim emission reductions or other milestones in *any* area including emission levels specified in the SIP. [28]

If the action is not exempt and cannot be presumed to conform, a conformity determination must be made. An action is in conformity ... *if*, for each pollutant that exceeds the *de minimis* threshold, the appropriate state or local agency makes a determination that the action meets the following requirements:[29]

1. For any criteria pollutant, the total ... emissions ... are specifically identified and accounted for in the applicable SIPs ...

2. For ozone or nitrogen dioxide, the total ... emissions ... are fully offset *within* the same nonattainment or maintenance area through a revision to the applicable SIP or ... there is *no net increase* ...

3. For ozone or nitrogen dioxide, the total ...

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[27] Emphasis added. Note that the DEIS on page 2-13 characterizes these emissions as "extremely small" without pointing out that, even if that were true, the *standard* against which such emissions *must* be measured is a *de minimus threshold*, and *every* VOC and NO_x emission increase in an ozone non-attainment area *must* trigger tough absolute mitigative measures *which are not identified* in the DEIS.

[28] How?

[29] Does this mean it must meet *all* three requirements?

> emissions, ... as a whole, together with all other emissions in the nonattainment area ... not exceed ... emissions *budgets* specified in an applicable SIP[30]*or* ... (if they) would exceed the specified emission budget, the governor of the state must make a written commitment to EPA that the state will submit a revision to the SIP that would achieve emission reductions needed to not exceed the emissions budget specified, through specific measures, including any reasonable mitigation measures required by the federal agency, *prior to the time emissions ... would occur.*[31]

(4-49) ...no action may be found in conformity unless it is in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP.[32] McGuire AFB will have to coordinate with New Jersey DEPE to determine *if* the proposed actions are in conformity with the New Jersey SIP. The final conformity determination will be made *by the Air Force* in a separate document.

4.3.4.1 Drinking Water

(4-50) The additional water usage resulting from realignment would not exert a higher water demand than in 1991 or than allowed by McGuire AFB's water allocation permit (Section 4.1.5.).[33]

4.3.4.3 Wetlands

(4-54) It is anticipated construction of new facilities in support of the realignment may impact wetlands ... The construction of the control

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[30] Because the KC-10s will be relocated in mid - 1994, this must be done or they presumably cannot operate.

[31] This is a strict mandate upon the Air Force and/or New Jersey's governor which does not permit discretion in the conformity determination promised by the DEIS.

[32] This is a strict mandate upon the Air Force and/or New Jersey's Governor which do not permit discretion in the conformity determination promised by the DEIS.

[33] While technically true, this statement glibly avoids the previously-documented fact that even at the lower 1991-1992 pumping levels experienced after Fort Dix was realigned, the USGS still found the aquifer water level to be dropping by 1 foot per year. The additional water usage resulting from McGuire realignment will increase this adverse impact. Such an impact would not be a problem at Plattsburgh AFB.

tower would eliminate 0.04 acre ... The parking apron would eliminate 12.6 acres of wetland ... permits will only be issued if there is "no practicable alternative" to the proposed activity. [34]

4.3.8.1 Historic Preservation

(4-58) ... if a proposed action might impact a historic property resource, consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation is required.[35]

4.4 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

(4-60) ... the realignment ... would result in some adverse impacts to the environment. Those adverse impacts that cannot be mitigated to insufficient levels ... are summarized in this section.

During operation, there would be no new violations of ambient air quality (separate from the regional ozone) ... *Any additional VOCs ... NO_x... would contribute to additonal ozone pollution.*

4.5 CUMULATIVE IMPACTS

4.5.3 Alteration of Interim Facilities for the Realignment

(4-62) Because the first KC-10 aircraft will be arriving in mid-1994, interim facilities will be needed to support the arrival.[36]

4.5.4 Additional Actions Announced for McGuire AFB

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[34] Plattsburgh AFB, of course *is* an alternative.

[35] Note that the closing of Plattsburgh AFB, which was done to enable McGuire AFB to expand, will cause the complete *abandonment* of dozens of 19th century buildings on the National Register of Historic Places. Has consultation with the *New York* state historic preservation officer been done?

[36] A far more significant mandate must also be met prior to arrival, namely compliance with the New Jersey SIP for mobile sources (actual KC-10 operations, maintenance, refueling, defueling and washing). The DEIS does not address this mandate or provide any assurance that it *can* be met. None of the six listed interim facilities on p. 4-63 address the issues of VOC and NO_x emissions which, if not mitigated ***will violate*** the SIP. The inescapable inference is that the KC-10s may be ***parked*** at McGuire AFB in 1994, but cannot be ***operated.***

(4-63) The 305th AMW would lose 18 C-141B aircraft, beginning in late 1994.[37]

[37] This action would reduce the number of C-141 aircraft in the Air Mobility Wing from 50 to 32, leaving the East Coast Air Mobility Wing at a total of 51 PAA aircraft (KC-10 and C-141) instead of the 88 (KC-10, KC-135 and C-141) called for in the Force Structure Plan and mandated by the DBCRC to be located at McGuire AFB. This appears to be a blatant violation of the law and a substantial deviation from the Force Strucure Plan.

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950425-15

FROM: CARPENTER, HERBERT	TO: DIXON
TITLE: CHAIRMAN	TITLE: CHAIRMAN
ORGANIZATION: PLATTSBURGH INTERMUNICIPAL DEV.	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: PLATTSBURGH AFB, MCGUIRE AFB	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON		(✓)	
DIR./COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
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COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA	✓		
COMMISSIONER COX	✓		
COMMISSIONER DAVIS	✓		
COMMISSIONER KLING	✓		
COMMISSIONER MONTOYA	✓		
COMMISSIONER ROBLES	✓		
COMMISSIONER STEELE	✓		
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER			
AIR FORCE TEAM LEADER		X	
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			
② DN	✓		
① EF	✓		

TYPE OF ACTION REQUIRED

(✓)	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING ISSUE PAPER REGARDING THE CAPACITY OF MCGUIRE AFB TO MEET THE MISSION REQUIREMENTS ORIGINALLY SLATED FOR PLATTSBURGH

Due Date: 950502	Routing Date: 950425	Date Originated: 950420	Mail Date:

PLATTSBURGH INTERMUNICIPAL DEVELOPMENT COUNCIL

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April 20, 1995

950425-15

Mr. Alan Dixon
Chairman
Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear Chairman Dixon:

Since we last corresponded with you on March 15, one of our members has compiled the attached and very thoughtful background piece relative to the capacity of McGuire AFB to meet the mission requirements originally slated for Plattsburgh AFB.

I hope that it contributes to the quality and depth of your deliberations concerning a "redirect" for any future joint use opportunities that may exist for the Air Force here in Plattsburgh. Once again, thank you in advance for your consideration.

Sincerely,

Herbert Carpenter, Chairman

Review of

Deviations from Force Structure Plan,
Environmental Constraints,
Physical Constraints
and
Operational Deficiencies

in the

Realignment of McGuire Air Force Base

As Ordered by

The Defense Base Closure and Realignment Commission 1993

Issues Raised by Plattsburgh Intermunicipal Development Council
in its
Request to Defense Base Closure and Realignment Commission 1995
for Re-Direct Hearing on
Decision to Close Plattsburgh A.F.B.

Prepared by Assemblyman Chris Ortloff, 110th Dist. NY
April, 1995

Review of

Deviations from Force Structure Plan,
Environmental Constraints,
Physical Constraints and
Operational Deficiencies

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Realignment of McGuire Air Force Base

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The Defense Base Closure and Realignment Commission 1993

Executive Summary

DBCRC 1993 realigned McGuire AFB by ordering the Air Force to put its East Coast Air Mobility Wing there and then (in a second resolution) ordered Plattsburgh AFB closed. The resolutions took on the force of law when the President accepted them and the Congress failed to rescind them. However, these orders have not been followed, the Force Structure Plan has been deviated from and environmental constraints have since been identified which prevent the Air Force from carrying out DBCRC's orders at McGuire AFB.

I. The Air Force Has Deviated from DBCRC Resolutions and The Force Structure Plan

Despite their explicit language and the clear force of law behind them, DBCRC '93's orders have not been followed. An East Coast Air Mobility Wing does not exist as a viable operational reality and is not located at McGuire AFB as ordered. Specifically, the wing's KC-135 tankers, ordered to McGuire by DBCRC '93, have instead been located at Grand Forks AFB, North Dakota (a few to other locations and one entire squadron to England). This is a substantial deviation from the Force Structure Plan under which the AMW was established, and from the orders of DBCRC.

No amount of Orwellian double-speak can refute these facts. Testimony of the Air Force Chief of Staff notwithstanding, neither McGuire AFB nor the Air Mobility Wing itself is functioning as ordered, and the magnitude of this deviation from the Force Structure Plan poses serious Concerns for the National Defense of the United States.

II. Adverse Environmental Impacts Prove That USAF Cannot Comply with DBCRC '93

The Air Force Draft Environmental Impact Statement for its realignment projects at McGuire AFB, published in March, 1994, discusses and raises several significant issues of fact relevant to a redirect on this matter. While the DEIS itself is moot (its process having been completed) a review thereof is nonetheless pertinent and useful in illuminating three types of additional issues:

1. Practical Environmental Constraints

These practical constraints explain and define parameters which have prevented the

Air Force from complying with the full realignment mandated by law (with Plattsburgh's KC-135s). These factors asserted the Air Force's DEIS prove PIDC's underlying claim that the DBCRC decision did not comply with the Force Structure Plan in the first place. *It could not comply.* No evidence of compliance was presented; *such evidence did not and does not exist.*

2. Legal and Regulatory Environmental Compliance Conflicts
These impacts of the proposed realignment may or may not be serious environmental impacts, but they appear to conflict with federal and New Jersey environmental quality mandates. By preventing or adversely affecting operation of realigned aircraft, they support PIDC's claim that forcing the Air Force to operate an Air Mobility Wing at McGuire jeopardizes the National Defense.

3. Significant Adverse Environmental Impacts
Even with a limited realignment, these impacts, *which would not exist at Plattsburgh AFB*, support PIDC's claim that evidence did not support the DBCRC resolution with respect to the final criteria.

Not surprisingly, the Air Force DEIS asserted that most of these environmental impacts could be mitigated. But in two specific areas of concern, no mitigating measures were identified, meaning that the Air Force has serious problems with both and has no practicable way to effectively deal with either of them at McGuire:

1. Air Traffic Congestion and Delay
In the DEIS, the Air Force admitted its potential inability to carry out the mission of the Air Mobility Wing, and *no mitigating measures were suggested or claimed.* The Air Force again asserted (as it had in recommending McGuire's active duty mission be terminated in 1993) that McGuire AFB is unsuitable for the Air Mobility Wing mission. Of critical interest to DBCRC '95 is the detail and specificity on this matter which was *suppressed by* DBCRC '93. **This is the official Air Force statement**:

"Air traffic in the vicinity of McGuire AFB currently is heavy. At 8,000 feet and above, the airspace is extremely congested from commercial aircraft, a condition that may lead to delays because of the need for proper aircraft spacing. Consequently, there is concern that the timing needed to properly carry out refueling training may be jeopardized during some busy portions of the day. A regularly planned rendezvous between a KC-10 and another military aircraft may be jeopardized if there are delays in the KC-10 authorization for travel in the departure region. Time constraints needed for proper training during these air refueling missions may be violated because of the commercial air traffic congestion in the departure region. The dimensions of this problem are not known ... 14 satellite airports (and) special use airspaces along with the air traffic control *wake turbulence separation criteria for heavy aircraft* may significantly limit the KC-10 local training capability."

(see p. 10)

2. Ozone Non-Attainment
Burlington County, New Jersey is an *ozone non-attainment area.* Operation of additional aircraft are shown in the DEIS to increase some ozone precursor gases by up to 415% despite mandatory restrictions on *any* new mobile sources of these gases. Either Air Force operations or other sources will have to be curtailed. If not the mission, then

the civilian economy will be impacted, and expensive mitigative measures *must* be taken in both additional capital construction and regular operating procedures, the cost of which was not considered by DBCRC '93. No such violations or costs would exist at Plattsburgh AFB. (see pp. 11-16)

Conclusions

1. The lack of active-duty KC-135s in the Northeast is a substantial deviation from the Force Structure Plan.

2. It results directly from the decision to close Plattsburgh AFB and assign its tankers to McGuire AFB, which could not accommodate them, leaving them instead in North Dakota and England.

3. Proof of ongoing serious air traffic delays at McGuire was available but was not considered by DBCRC '93. Further proof is now available along with conclusions contained in the DEIS.

4. The cost of extensive environmental mitigation measures mandated at McGuire (but not at Plattsburgh) was not considered by DBCRC '93.

• Plattsburgh AFB has none of these problems and should remain on active status as the Northeast base for active duty tankers or an Air Mobility Wing.

I. Deviations from Force Structure Plan and DBCRC Orders

1. Clear and Direct Orders Were Given But They Were Not Followed

The Air Force has not taken the action mandated by the DBCRC '93, defined by the following language in two resolutions adopted on June 24, 1993:

> *"Move the 19 KC-10 aircraft from Barksdale Air Force Base to McGuire Air Force Base. Move the requisite number of KC-135s to establish the East Coast Mobility Base at McGuire."* (p. 132, l. 9-12, DBCRC hearing record)
>
> and
>
> *"Close Plattsburgh Air Force Base and transfer the KC-135s to McGuire Air Force Base."* (p. 200, l. 15-16).

2. The Commission Vote Was Based on a False Assurance of Force Structure Compliance

During the commission discussion on whether closing Plattsburgh would leave enough tankers in the northeast (the critical question as to whether the proposed action would deviate from the Force Structure Plan) the resulting scenario was described by Mr. DiCamillo:

> *"With McGuire as the mobility base, that essentially takes the same tankers that would have been at Plattsburgh under the mobility base and places it just a little bit further south ..."* (p.195, l. 16-19)

Thus assured, the commissioners adopted the second resolution above by a 6-1 vote. However, *none* of Plattsburgh's KC-135s were transferred to McGuire, nor were any *other* KC-135s transferred to McGuire. Plattsburgh's KC-135s mostly went "a little bit further *west*" to Grand Forks AFB, North Dakota (1225 miles from Plattsburgh and 1330 miles from McGuire). Thus, the Air Force did not comply with the direct order to move "the requisite number of KC-135s" to McGuire and its action deviates from the Force Structure Plan.

3. No Active-Duty KC-135s Are Left in the Northeast

As a result, *there are no active-duty KC-135 tankers in the Northeast.* The east coast Air Mobility Wing's primary mission is impaired and the ability of active-duty Air Force tankers to safely, cost-effectively and reliably carry out their on-going refueling missions in support of the Atlantic air bridge is seriously jeopardized because these assets are based nearly 2000 miles west of their refueling points on the tanker track. Subsequent Unit Integrated Deployment mission requirements have led to one squadron being assigned on extended TDY to England in order to cover refueling missions within range of Plattsburgh but not within range of Grand Forks.

Furthermore, as we shall see in the next section, the only active duty tankers of any kind in the Northeast, McGuire's KC-10s, cannot conduct full operations as required under the Force Structure Plan

because of environmental constraints, and what operations they do conduct cause adverse environmental impacts which would not occur at Plattsburgh AFB.

4. A Redirect is Essential to Correct a Substantial Deviation from the Force Structure Plan

DBCRC '93 members asked an important question prior to voting to close Plattsburgh AFB. The commissioners correctly understood that they could not legally take an action which created a substantial deviation from the Force Structure Plan. They correctly understood that the Force Structure Plan required active duty KC-135s in the Northeast. Their votes to close Plattsburgh AFB clearly relied on Mr. DiCamillo's assurance that their action would not deviate from the plan. DBCRC '95 commissioners, unlike their predecessors, possess the truth:

Conclusion

1. The lack of active-duty KC-135s in the Northeast is a substantial deviation from the Force Structure Plan

2. It results directly from the decision to close Plattsburgh AFB and assign its tankers to McGuire AFB, which could not accommodate them, leaving them instead in North Dakota and England.

- **Closing Plattsburgh did not leave enough tankers in the Northeast.**

A redirect is essential on this issue alone.

II. Undue Adverse Environmental Impacts Impair the Mission

Although the Air Force originally recommended Plattsburgh AFB to host the Air Mobility Wing, its statements to DBCRC '93 and '95 have maintained that the AMW can operate within mission parameters at McGuire. Despite persistent reports of internal reservations about the AMW's readiness, the Air Force did not recommend a redirect this year.

However, Air Force statements made in another official context tell a very different story. Discrepancies between Air Force statements to DBCRC and to state and federal environmental agencies bear close scrutiny by DBCRC '95 commissioners.

Statements made by the Air Force in its own official documents prepared as part of the environmental assessment of the realignment action at McGuire support the conclusion that McGuire AFB is not properly fulfilling the mission assigned there by DBCRC '93 and cannot properly host the Air Mobility Wing.

> *(The remainder of this review draws directly from these official Air Force statements. They are presented here in topical order, not the order in which they were presented in the Draft Environmental Impact Statement, with page citations where appropriate and with parenthetical language added to give proper context to the present situation and/or ability of McGuire's environment to accommodate the additional KC-135s required to comply with the Force Structure Plan.)*

From the Executive Summary of the DEIS, March 1994

1. Air Traffic Congestion

(p. xix) "Concerns exist relative to congestion of air traffic. The congestion in these areas could cause delays in Air Force training missions or in commercial flights." (Adding the 28 KC-135s ordered by DBCRC '93 would cause even more delays in training missions and other operations).

2. Ozone Non-attainment

(p. xv) "The KC-10s ... add volatile organic compounds ... precursors to ozone (for which the McGuire AFB area has been designated as in "severe" nonattainment). The effect ... is largely unknown. However, since the region's attainment status is so poor, all new stationary and mobile sources (however minor) must ... be in conformity with New Jersey's state implementation plan (SIP) for ozone."

3. Threatening Salination of the Drinking Water Supply

(p. xvii) "... increased water use associated with the realignment and other force structure action ... contribute(s) to the decline of the water level of the deep aquifer supplying water for McGuire AFB." (Further decline threatens to result in sea water infiltration).

4. Elimination of Wetlands

(p. xvii) "Construction (of the modest realignment to bring only the KC-10s there) (has) eliminate(d) (12.64 acres of wetland). Any (further) development (of additional ramp and runway would destroy even more) wetlands. Such development has not been

authorized by the state of New Jersey and the New Jersey Pinelands Commission, (as would be required by law)."

Notes on Section 1: Purpose of and Need for the Action

Of interest to any reader of this section is the repeated affirmation in the DEIS that a "no action" option, normally required in every NEPA environmental review process, is not possible because the Defense Base Closure and Realignment Act (DBCRA) exempted base realignments from this requirement. However, the Air Force in fact takes a deliberate "no action" option by willfully failing to follow the orders of the DBCRC to include KC-135 aircraft in the realignment. The Secretary of the Air Force failed to implement the law; thus, a significant portion of the realignment mandated by the DBCRC for McGuire AFB is simply ignored for the purpose of claiming a smaller environmental impact.

Extrapolating from the DEIS for this small realignment clearly shows the inherent contradiction in the following two points: the realignment actually done at McGuire AFB substantially deviated from the Force Structure Plan, but if it had complied with the DBCRC orders, far greater adverse environmental impact would have resulted. Congress expressly precluded consideration of alternatives with less adverse environmental impact, to all agencies but DBCRC. Thus, DBCRC is the only agency with legal authority to do so and the PIDC request for a redirect expressly offers commissioners that opportunity. however ...

The main reason for DBCRC to examine the environmental impact statements is to more fully understand a number of practical environmental constraints, described therein, which help illuminate just why it was never possible for McGuire AFB and the region to accommodate the full Air Mobility Wing called for in the Force Structure Plan.

Obstacles to McGuire presented in the DBCRC '93 hearing process were essentially space and facility limitations, which DBCRC '93 presumed to "overcome" by accounting for the cost of additional ramp and fuel system construction. The EIS documents help to show how these constraints also have an environmental component, the mitigation costs of which were not accounted for by DBCRC '93. In other words, the ability of McGuire AFB to accommodate the full Air Mobility Wing is precluded in a practical way by environmental constraints that can't be waved away with a magic wand the same way putative construction costs were dismissed by DBCRC '93.

Table 2.3

This table details a number of adverse environmental impacts of the limited realignment action at McGuire AFB which would not have existed at Plattsburgh AFB:

(2-11) "Extensive demolition (of buildings) would be done (to make room for ramp expansion) requiring removal and disposal of asbestos."

No demolition would have been required because Plattsburgh's ramp required no expansion to accommodate the mission.

(2-15) "Increased water withdrawal would contribute to decline of water level in the deep aquifer."

Plattsburgh's water is drawn from surface reservoirs fed by mountain streams. No such adverse impact would have existed at Plattsburgh.

"Increase in impervious surface of 40 acres would result in increased storm-water runoff along the flight line. ... Grassy old-field vegetation would be removed."

No ramp expansion would have been required and thus no such adverse environmental impact would have occurred at Plattsburgh.

(2-16) "Elimination of 12.6 acres of wetlands."

Ditto.

"Elimination of habitat (for threatened species)."

Ditto

"WWII structures that are potentially eligible for the National Register will be demolished (to make room for ramp expansion)."

No such adverse cultural impact would occur at Plattsburgh. To the contrary, the closing of Plattsburgh AFB will result in the abandonment and resulting degradation of numerous 19th-century buildings already on the National Register.

Air Space and Air Traffic Congestion Issues

3.2.12
Air Space

The Air Force avoids the real issues in this section.

Despite acknowledgements elsewhere that air space considerations are severe constraints on operations of the Air Mobility Wing's additional heavy aircraft, the entire discussion here is about existing air space requirements for the old airlift wing which are irrelevant to the new mission assigned to this base by the DBCRC. No discussion is presented for air space to be used by the new Air Mobility Wing.

This is a major defect in the document, but also suggests that any honest discussion of these issues would reveal the true operational inadequacies of the air space around McGuire.

DBCRC '95 should require the Air Force to give detailed testimony on all the actual air space issues, which DBCRC '93 glossed over.

The question is not "can the FAA make the air space safe?" In 1993, that was the only question allowed of the FAA, to which it responded in the affirmative, and further discussion was terminated. In fact, FAA can always *make* any *air space "safe," if necessary, by restricting traffic. From the point of view of National Defense capability, however, an air space made "safe" by excessive restrictions is detrimental to readiness. In 1993, valid questions about the extent to which FAA was already restricting McGuire-originated missions were never fully explored. The DEIS offers DBCRC '95 an opportunity to begin to examine the Air Force's real concerns.*

4.1.12
Air Space

Concerns Suppressed by DBCRC '93:

(4-36) "Air traffic in the vicinity of McGuire AFB currently is heavy. At 8,000 feet and above, the airspace is extremely congested from commercial aircraft, a condition that may lead to delays because of the need for proper aircraft spacing. Consequently, there is concern that the timing needed to properly carry out refueling training may be jeopardized during some busy portions of the day. A regularly planned rendezvous between a KC-10 and another military aircraft may be jeopardized if there are delays in the KC-10 authorization for travel in the departure region. Time constraints needed for proper training during these air refueling missions may be violated because of the commercial air traffic congestion in the departure region. The dimensions of this problem are not known* but are not *thought* to be insurmountable. The McGuire AFB air traffic control area comprises 14 satellite airports that serve many light civil aircraft. Additionally, the air traffic area consists of the Coyle drop zone, Navy Lakehurst drop zone, an aerobatics box, warning areas, and an Army drop restricted area. These special use airspaces along with the air traffic control *wake turbulence separation criteria for heavy aircraft* may significantly limit the KC-10 local training capability."

**Some critical dimensions of the problem, however are well known to the FAA and the Air Force. In addition to two decades worth of documentation summarized in a scathing FAA letter to DBCRC '93, there have been the following developments since DBCRC '93:*

- *McGuire tankers tasked to perform real (not training) refueling missions for aircraft inbound from Europe refused the assignments due to inability to surmount air traffic control delays regularly experienced by McGuire aircraft. In at least two cases, tankers based at Plattsburgh AFB accepted and promptly fulfilled the missions, enabling those inbound aircraft to make it safely to landfall without running out of fuel and crashing into the Atlantic Ocean..*
- *Until Plattsburgh AFB's fuel pit operation was shut down, McGuire-based. KC-10s on routine refueling missions would typically depart McGuire with half a load of fuel, fly to Plattsburgh, land and take on a full load, launch from Plattsburgh and complete the mission. This was due to the fact that fully-loaded KC-10s cannot launch from McGuire because the runway isn't long enough.*
- *Since Plattsburgh ceased being available for fueling, McGuire KC-10s routinely require 2 aircraft to perform a routine refueling mission: each aircraft launches with half a load of fuel, one refuels the other in mid-air and returns to McGuire while the now fully-loaded tanker proceeds to the rendezvous to carry out the mission. Fully-loaded KC-10s cannot launch from McGuire.*
- *Reliance on only National Guard and Reserve KC-135s in the Northeast is an unfair burden; Integrated Force Structure tanker missions rely on a core of active duty aircraft and aircrews which doesn't exist.*
- *Aircraft departing Northeast US bases bound for continental European bases, in order to arrive at their destinations during hours of the day when the receiving base is not shut down for domestic noise considerations, must typically depart US bases at 0200 hours. When active-duty KC-135s were based at*

Plattsburgh, these tankers customarily fulfilled such missions. However, National Guard and Reserve aircrews do not work at night, and cannot accept missions requiring 0200 departure times. Thus, the only active-duty KC-135s, based in Grand Forks, must take these missions.

- *Because of the repeated demand for such Unit Integrated Deployment missions, as well as refueling missions over the eastern reaches of the Atlantic Air Bridge, the Air Force has found it necessary to place an entire squadron from Grand Forks AFB on extended TDY status in England. It goes without saying that this incurs extra cost, not only in fiscal terms, but in personal terms as well, which would not incur if they were based at Plattsburgh.*

This is what is at issue. Lives and families, not only funds, are at stake.

4.2.11
Air Space

(4-41) "No mitigative measures have been identified for operations in special use air space areas that would be utilized by the KC-10 aircraft."

Ozone Non-Attainment Air Pollution Issues

3.2 ENVIRONMENTAL SETTING

3.2.1.2
Air Quality

(3-4) "... the area around McGuire AFB has been designated as nonattainment ... for 0_3. The 0_3 standard has been exceeded at the monitors in the vicinity of McGuire AFB on at least four days within a three-year period ... The McGuire AFB monitoring site recorded four days in 1989, four days in 1990, and 10 days in 1991 when 0_3 concentration averages violated the primary NAAQS (0.12 ppm one-hour average); the secondary standards for 0_3 (0.08 ppm one-hour average) were exceeded on 149 days in 1990.

Compliance with the New Jersey State Implementation Plan (SIP) is a mandate, from which the Air Force is not exempted by the DBCRA. Violations within the state are increasing over time. Operating additional KC-10s within the Burlington County ozone non-attainment area cannot be done without affecting one or more variables and potentially violating the SIP.

(3-6) "The largest annual VOC emissions come from aircraft operation (328.0 tons), followed by aircraft engine trim/power checks (259.6 tons)."

Because of waiting time with engines running due to air traffic congestion, these emissions are larger at McGuire than would be experienced at Plattsburgh AFB or any other base, and the very large increase in training time for an Air Mobility Wing would further exaggerate this adverse environmental impact in the Burlington County ozone non-attainment area.

"The New Jersey SIP requires that 1990 VOC and NO_x baseline source emissions for the entire state be reduced by 10% by 1996 ... This emissions reduction requirement would necessitate a change in the use or application of control technologies of some of the above-mentioned sources."

Note: again, this is a mandate from which the DBCRA does not exempt the Air Force. No mitigating measures are offered to enable the Air Force to comply with this mandate, which would not obtain at Plattsburgh, inasmuch as Plattsburgh does not lie in an ozone non-attainment area.

4.1 PROPOSED ACTION AND ALTERNATIVES

4.1.1 Air Resources

(4-1) "... the additional KC-10 aircraft operations would increase the annual emissions of all pollutants, except PM_{10}."

DEIS tables 4-1 and 4-2 show the critical figures for VOCs and NO_x, the ozone precursors. Those tables are summarized here:

From Table 4-1: Aircraft Emissions (tons per year)

	VOCs	NO_x
1993 Baseline total	328.0	227.6
Future total with 24 KC-10s	519.6	1,016.0
Percentage Increase	**58.4%**	**346.4%***

**Note: on page 2-13, the DEIS characterizes this as "extremely small", while on page 4-37 it characterizes it as "significant quantities (which may force) controls on other sources to compensate." Further not that conversion to JP-8 introduces a 20% variation in this number which could be as high as 415%*

From Table 4-2: All Emissions at McGuire AFB (tons per year)

	VOCs	NO_x
1993 Baseline Total	1,096.5	866.8
Future Total with 24 KC-10s	1,288.1	1,655.2
Percentage Increase	**17.5%**	91.0%

(4-1) "All sources of ozone precursors at McGuire AFB must be controlled and minimized in order to comply with the New Jersey State Implementation Plan (SIP)."

Again, this is a mandate.

(4-3) "Under the worse-case scenario, *and exclusive of ozone,* the pollutant additions from the KC-10s would not result in violations of any of the ambient air standards because background concentrations are far below the air quality standards for each pollutant."

Note that the emphasized words above were not emphasized in the DEIS. Yet they are the salient ones. Ozone is a critical consideration and pollution additions from the KC-10s would be a violation of significant magnitude.

(4-5) "The number of stationary sources of VOCs ... would increase."

"Emissions of VOCs ... from ... jet fuel, gasoline, paints and degreasers ... additional aircraft fuel ... would result in additional VOC emissions."

"The Air Force intends to convert completely to the use of JP-8 fuel in FY 1994. The effects of the JP-8 conversion on emissions from aircraft engine exhaust are currently unknown. Preliminary studies...indicate that emissions of all critical pollutants would *vary* within 20% of JP-4 engine exhaust emissions."

It appears a deliberate attempt has been made here to imply that emissions would decrease, *when in fact "vary" can mean either increase or decrease. A 20% variation means that the 346.4% increase in* NO_x *emissions predicted in Table 4-1 could be* as high as 415%, *or could be lower. The Air Force says it has no idea, yet confidently forges ahead with this serious adverse environmental impact in an ozone non-attainment area when no such issue would exist at Plattsburgh AFB.*

4.22 MITIGATIVE MEASURES

4.2.1 Air Resources

(4-37) "... the significant quantities of ozone to be emitted as a result of the realignment and additional force structure action may make it necessary to place controls on other sources* to compensate ... Because the region is currently in nonattainment for ozone, the paint booths and degreasing washracks needed to support the KC-10 operations must be constructed in consultation with the New Jersey DEPE. The extensive permitting requirements of the state's "lowest achievable emission rate" program mandate that these new facilities employ state-of-the-art emission control technologies."

* *Controls on other sources typically include restrictions on automobiles, required use of reformulated gasolines at higher costs, bans on backyard barbecues and gas-powered lawn mowers, as well as a myriad of restrictions on private businesses. A "lowest achievable" strategy is essentially a cost-irrevelant one. Standards must be achieved, whatever the cost. Costs to achieve this will be substantially higher than construction costs for these stationary emissions sources would be at Plattsburgh AFB. They are certainly higher, by a significant margin, than estimates used by the DBCRC in concluding that there was virtually no difference in construction costs between Plattsburgh and McGuire.*

(See DBCRC June 24, 1993 transcript, pp. 96-104, concluding with Commissioner Byron's question "... is that the same cost at each of the facilities?" and Mr. DiCamillo's answer that "it's in the same ballpark.")

4.3 ENVIRONMENTAL REGULATIONS AND PERMIT REQUIREMENTS

4.3.1 Introduction

(4-41) "... various federal statutes ... impose environmental protection and compliance requirements upon the Air Force."

(4-42) "... (also) federal law delegates enforcement or implementation authority to state or local agencies ... construction and *operation* of the facilities necessary to carry out the realignment *must* be in compliance with the statutes, regulations and standards then in effect."

Note that these are mandates which apply not only to the construction project but to the operation of the aircraft thereafter.

4.3.2 Air Pollution

Without citing the entire text here, this detailed discussion of the interrelated impacts and mitigative measures required by the Clean Air Act (CAA) is illustrative of the difficulties involved in permitting any new emission source. When the ozone non-attainment status of McGuire AFB is considered in this context, a general idea of the practical constraints facing the Air Force in attempting to operate the Air Mobility Wing at McGuire is gained.

A thorough analysis of the combined effect of the law and this circumstance is not done by the DEIS, but if done, would more clearly expose the severity of the constraints. DBCRC '95 should do so, since no other agency has the authority.

(4-45) "To implement a control strategy for ozone pollution ... there may be no storage of VOCs in any stationary storage tank having a maximum capacity of 10,000 gal or greater and the transfer of any VOC that has a vapor pressure or sum of partial pressure of 0.02 lb/in^2 absolute or greater at standard conditions into any receiving vessel having a maximum capacity of 2,000 gal or greater unless the operation is equipped with control apparatus to prevent the emission of a VOC into the outdoor atmosphere.

(4-47) "The CAA established the NAAQS to protect the public from adverse effects caused by specific pollutants. For ozone, the NAAQS is set at a maximum of 0.12 ppm averaged over a one-hour period. ... this standard must be attained ... McGuire AFB is ranked severe or low severe and must meet the NAAQS standard for ozone by November 15, 2005. ... 24 KC-10s would add about 190 tons per year of VOCs and 790 tons per year of NO_x to the atmosphere (Table 4.1) The direct emissions from the proposed relocation, therefore, exceed the *de minimis* threshold and a conformity determination must be made."

(4-48) "There are no exemptions from the rule. ...Under the rule, the emissions from the construction of any facility that would require permitting as a new major or modified source under the New Source Review Program or the Prevention of Significant Deterioration Program are not included in the calculation of emissions for determining the direct and indirect emissions that require conformity determination. However, since the aircraft, as mobile sources, are not required to be permitted in New Jersey, those emissions must be counted and clearly exceed the *de minimis* threshold set forth in the rule."

Note that the DEIS on page 2-13 characterizes these emissions as "extremely small" without pointing out that, even if that were true, the standard against which such emissions must be measured is a de minimus *threshold, and every VOC and* NO_x

emission increase in an ozone non-attainment area must trigger tough absolute mitigative measures which are not identified in the DEIS.

"The action *may* be presumed to conform *if* McGuire AFB can clearly demonstrate that, using methods consistent with those set forth in the rule, the emissions from the proposed activities would not cause *or contribute to any* new violation of *any* standard in *any* area; interfere with the provisions in the applicable SIP; increase the frequency or severity of *any* existing violation of *any* standard in *any* area; or delay timely attainment of *any* standard or *any* required interim emission reductions or other milestones in *any* area including emission levels specified in the SIP."

How? Park the aircraft and never fly them?

"If the action is not exempt and cannot be presumed to conform, a conformity determination must be made. An action is in conformity ... *if,* for each pollutant that exceeds the *de minimis* threshold, the appropriate state or local agency makes a determination that the action meets the following requirements:

"1. For any criteria pollutant, the total ... emissions ... are specifically identified and accounted for in the applicable SIPs ...

"2. For ozone or nitrogen dioxide, the total ... emissions ... are fully offset *within* the same non-attainment or maintenance area through a revision to the applicable SIP or ... there is no net increase ...

"3. For ozone or nitrogen dioxide, the total ... emissions, ... as a whole, together with all other emissions in the nonattainment area ... not exceed ... emissions *budgets* specified in an applicable SIP *or* ... (if they) would exceed the specified emission budget, the governor of the state must make a written commitment to EPA that the state will submit a revision to the SIP that would achieve emission reductions needed to not exceed the emissions budget specified, through specific measures, including any reasonable mitigation measures required by the federal agency, *prior to the time emissions ... would occur.*

(4-49) "...no action may be found in conformity unless it is in compliance or consistent with all relevant requirements and milestones contained in the applicable SIP. McGuire AFB will have to coordinate with New Jersey DEPE to determine *if* the proposed actions are in conformity with the New Jersey SIP. The final conformity determination will be made *by the Air Force* in a separate document."

4.4 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

(4-60) "... the realignment ... would result in some adverse impacts to the environment. Those adverse impacts that cannot be mitigated to insufficient levels ... are summarized in this section. ... During operation, there would be no new violations of ambient air quality (separate from the regional ozone) ... Any additional VOCs ... NO_x ... would contribute to additonal ozone pollution."

(2-9) "When the first KC-10 aircraft arrived at McGuire AFB from Barksdale AFB in the summer of 1994, none of the facilities listed in Section 2.2.1 were available. During the construction phase, required maintenance for the KC-10s had to be conducted while the aircraft were sitting outside on the ramp. If an aircraft developed a fuel leak, repairs had to be delayed until the temperature remained above 50° F for an extended period of time. Other maintenance, such as hydraulic work on struts and No. 2 engine changes, cannot be done on a ramp and could not be done at McGuire AFB."

"Such operations can be made to work temporarily, but the mission cannot be sustained under these conditions."

No such problems would have existed at Plattsburgh AFB.

Groundwater Issues

3.2.5.2
Groundwater

(3-27) "The deep hydrogeologic unit present at McGuire AFB is the Potomac-Raritan-Magothy aquifer system. The system is regional in extent and is the primary source for potable water supplies in the area.

"The primary source of recharge to the system consists of rainfall or surface water.

"Before the massive pumping that has been relatively commonplace in the region since the early 1960s, groundwater flow was primarily down gradient (south or southeast). Large pumping centers such as McGuire AFB have caused large-scale reversal of the historical flow path. During the period 1900-1968, groundwater levels in the system declined about 80 ft in the Fort Dix-McGuire AFB area.

"In 1992 groundwater levels continued to undergo long-term decline at a rate of about 1 foot per year."

The Air Force claims that the additional pumping for the realignment is acceptable because Ft. Dix pumping declined by more than 50% after 1987. However, that decline had already occured *when the USGS 1993 report documented the continued foot-per-year decline in groundwater levels. No such adverse impact, false claim by the Air Force or even the concern about groundwater would exist at Plattsburgh AFB.*

"The New Jersey DEPE has designated the Camden Metropolitan area, including McGuire AFB, as a critical water supply management area because of possibility of saltwater contamination in the overpumped Potomac-Raritan-Magothy aquifer system."

It goes without saying that, even if groundwater levels were an issue at Plattsburgh AFB, saltwater contamination would not because Plattsburgh lies on freshwater Lake Champlain, at an elevation of 95-100 feet above mean sea level.

4.1.5
Water Resources

(4-20) "Potential impacts ... include degradation of water quality (and) depletion of water supplies."

(4-21) "The realignment would increase the water requirement by about 25%."

(4-22) "The total withdrawal ... would not exceed the water permit amount. However, the deep aquifer that supplies the water for McGuire AFB is overpumped, and the potentiometric surface continues to drop about 1 ft a year. The realignment at McGuire AFB would increase the water withdrawal and contribute to the decline of the potentiometric level. The potential impact on groundwater level from the realignment and the proposed force structure action at McGuire AFB would be a function of the increased number of personnel and dependents moving into the area ... although the realignment at McGuire AFB would increase the current water use, the combined impact of a decrease in personnel at Fort Dix and an increase at McGuire AFB would not result in a higher water demand than that experienced before 1991."

This is verified by Table 3.9 on page 3-28. The existing permit does allow for the proposed increase, but - as noted above - even the significantly lower pumping of 1992 was found by USGS in 1993 to be lowering the groundwater level by one foot per year. No such issue would exist at Plattsburgh AFB.

4.3.4.1 Drinking Water

(4-50) "The additional water usage resulting from realignment would not exert a higher water demand than in 1991 or than allowed by McGuire AFB's water allocation permit (Section 4.1.5.)."

While technically true, this statement glibly avoids the previously-documented fact that even at the lower 1991-1992 pumping levels experienced after Fort Dix was realigned, the USGS still found the aquifer water level to be dropping by 1 foot per year. The additional water usage resulting from McGuire realignment will increase this adverse impact. Such an impact would not be a problem at Plattsburgh AFB.

Wetlands Issues

(4-25) "The proposed expansion of the aircraft parking apron...would eliminate 93% of this (13.5-acre) wetland."

(4-26) "Wetlands...would be destroyed."

No wetlands would be destroyed at Plattsburgh AFB.

(4-54) "It is anticipated construction of new facilities in support of the realignment may impact wetlands ... The construction of the control tower would eliminate 0.04 acre ... The parking apron would eliminate 12.6 acres of wetland ... permits will only be issued if there is "no practicable alternative" to the proposed activity."

Of course, Plattsburgh AFB is a practicable alternative, and DBCRC may consider the Plattsburgh AFB option, even if the DBCRA prohibits such an alternative under NEPA.

Historic Preservation Issues

(4-58) "... if a proposed action might impact a historic property resource, consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation is required."

The closing of Plattsburgh AFB, which was done to enable McGuire AFB to expand, will cause the complete abandonment of dozens of 19th century buildings on the National Register of Historic Places and an historic military cemetery. Yet, despite this direct causal link to the McGuire realignment project, consultation with the New York *state historic preservation officer was not done as part of the DEIS.*

Conclusions

1. Air Traffic Congestion unquestionably limits training near McGuire.

2. FAA aircraft separation requirements for KC-10s further limit training near McGuire.

3. Air Traffic Delays at McGuire unquestionably affect timing of refueling training.

4. Air Traffic Delays at McGuire unquestionably jeopardize actual refueling missions.

• Air Traffic Delays at McGuire jeopardize the National Defense capability.

1. Ozone issues severely restrict mobile sources of ozone precursor gasses in the McGuire area.

2. Just 24 KC-10s may increase NOx emissions at McGuire up to 415%.

3. Any additional emissions violate the New Jersey SIP.

4. The limited realignment at McGuire thus creates daily ozone-precursor emissions violations.

• The full realignment ordered by DBCRC '93 has proved to be impossible at McGuire.

• Plattsburgh AFB has none of these problems.

A redirect is essential on these issues, and only a redirect can solve them.

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call.

surface impoundment - is a RCRA unit -
Texas is not exempt - but it's closed.
post closure.

Interim status regs: require no pmts

what are yr. RCRA compliance costs?

what generator fees do you pay?

what transport fees do you pay?

what are yr costs to dispose?
" " " " " transport?

who does it get shipped to?
Tons/yr?

Do any fees get waived as result of SMOA?

[redacted]

KEARNS Req. for Data.

744-1289

Scenario Developmt Data Call for COBRA # 2-14-0114028Z

- closes INDIANAPOLIS & LOUISVILLE; moves plating to Watervliet NY not to Norfolk.

$0

- ~~Elim~~ Environ. Compliance costs cited for model if move to Norfolk. (Army)
- W.V. claims $430,000 costs: we don't know what it's for.

~~have don't know what reqs capture~~

Brian K's requests:

- Brian asked for WV original data re: plating — doesn't see summary for. - req all data for WV ~~from~~ that Navy received from Army.

Call EPA Region 1 for Kearns

re: plating.

what kinds of compliance does plating in N.Y. require?

RCRA
what permits does WV have on file.

waste disposal costs : generic waste disposal info.

what RCRA compliance activities need plating in NY region?

- what RCRA permits does waterfleet Arsenal have?
- what are waste disposal costs?
- what are RCRA compliance costs?

[what are waste disposal costs & Norfolk vs N.Y.
" " compliance " " "]

Louisville: what RCRA permits does it have?
what are waste disposal costs?
what are RCRA compliance costs?

"Waterfleet"

212 264 8428
Laura Livingston.

possible
2 reasons why WV doesn't pay much in the way of fees:
- Not a TSD (only surface impoundment is closed) - Treatment done via wastewater treatment plant is RCRA exempt - sludge from ww trmt is delisted
- Fees to generate may have been

~~Edwin~~

RCRA permitting - New York State Dept of Env. Cons.
~~Edwin~~ Edwin Dassatti c/o (518) 485 8988
Dir. chief

→ Scott Menrath (518) 457 9254 NYState Dept EnvCon.
* Scott

Permitting - Surface impoundment - clean closure
container storage - < 90 day storage area.
filed Part A → require closure.

Permitting operations → Interim status regs -
Regs are identical for NYS as for Fed regs.

Transporter - manifest - forms
Generators + transporters.

Transporters: publicly waste haulers -
manifests → 6 or 7 copies →
Facility keeps a copy.
Transporter - disposal facility keeps copy.

Fees to generate - fee schedule?
Fees to transport - fee schedule?
Generators + TSD + transporters.
Transporter fees: assessment made $500 per vehicle $200 for
Assessment made to the state: each add'l vehicle -
(516) 457-6858

Fees charged to generators -

< 15 tons
15 - 1000 $1000 yr
20,000
40,000

} annual fees -

TSD fees charged as well -

Except for financial assurance -

Not exempt from fees - MOU & MOA
"DSMOA-"
Pay 1% of the remedial costs for projects.

DSMOA is
DoD is waived from paying fees due to
DSMOA -

(518) 266 5732
Mr. Wunderlee - Jim Sherman.
Russell Wells -
John Parris.

Corrective action document
cannot be

wastewater treatment is exempt from
RCRA.

Treatability - is done at wastewater treatment
spent solvent - shipped off - caustics -
sludge - waste characterization → delisting
no longer a haz waste.

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New York / Watervliet

What RCRA permits required?

what are waste disposal costs?

" " RCRA compliance costs [costs for permit, etc.]?

Louisville

what RCRA permits required?

what are waste disposal costs?

" " RCRA compliance costs?

Nurre, Deirdre

From: Kerns, Brian
To: Nurre, Deirdre
Subject: RE: Louisville/Watervliet
Date: Wednesday, March 29, 1995 11:34AM

My extension is 179
The workload would be less at Watervliet, because some of the gun work will be accomplished at Norfolk, however the major platting operations will continue at Watervliet.

Bob Miller from the Army team talked to some army people yesterday about Watervliet and has some interesting information that maybe you should follow up with him about.

Thanks, Brian

>From: Nurre, Deirdre
>To: Kerns, Brian
>Subject: Louisville/Watervliet
>Date: Wednesday, March 29, 1995 11:16AM
>
>Hey Brian, what's yr phone#? Tried to call you.
>
>At the risk of asking you a question I've already asked you:
>I want to know whether 100% of the plating activities will be
>transferred to Watervliet, or whether the plating activities
>will be reduced/slowed/minimized when they are resumed at
>Watervliet.
>
>Will the Army plate just as many guns at Watervliet as the Navy
>had been plating at Louisville?
>
>Sorry if I'm repeating a question I've already asked you
>....you can see where I'm going with this question -- if the
>costs are estimated to be less but the projected workload is
>also projected to be less, we've got to account for it in our
>comparison.
>
>THANKS! Deirdre
>

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DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

DATE: MAY 1 1995

TO: (412) 572-4901 Fax
DOUG HILDREY

FR: DEIRDRE MURRE

RE: MODEL F.O.S.L.

PAGES: 14

such as aviation fuel and motor oil) potentially on the property.

E. Provide adequate public and regulatory participation.

III. POLICY

A. Requirement for Assessment, Determination and Documentation of Properties Suitable for Outlease

In the case of real property to which this policy applies, the head of the DoD Component with accountability over the property, or his/her designated representative, shall assess, determine and document when properties are suitable for outleasing. This assessment and determination will be based on an Environmental Baseline Survey (EBS) and will be documented in a Finding of Suitability to Lease (FOSL) as described below.

B. Investigation

1. Environmental Baseline Survey (EBS). An EBS will be prepared encompassing any parcel to be outleased. The EBS will be based on all existing environmental information related to storage, release, treatment or disposal of hazardous substances or petroleum products on the property to determine or discover the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product. In certain cases, additional data, including sampling and analysis, may be needed in the EBS to support the FOSL determination.

A previously conducted EBS may be updated as necessary and used for making a FOSL determination, where appropriate. An EBS also may satisfy other environmental requirements (e.g., to reach a Finding of Suitability to Transfer [FOST] or meet the uncontaminated parcel identification requirements of the Community Environmental Response Facilitation Act [CERFA]).

2. Procedures for Conducting an EBS. The EBS will consider all sources of available information concerning environmentally significant current and past uses of the real property and shall, at a minimum, consist of the following:

which could migrate to the parcel during the lease term.

g. Ongoing response actions or actions that have been taken at or adjacent to the parcel.

h. A physical inspection of property adjacent to the real property, to the extent permitted by owners or operators of such property.

i. Sampling, if the circumstances deem appropriate.

NOTE: For the purposes of paragraphs b, e, f, g, & h above, "adjacent properties" should be defined as either those properties contiguous to the boundaries of the property being surveyed or other nearby properties. In either case, the survey should be addressed to those portions of the properties relatively near the installation that could pose significant environmental concern and/or have a significant impact on the results of the EBS.

3. Documentation of an EBS. At the completion of the EBS, a report will be prepared which will include the following:

a. An Executive Summary briefly stating the areas of real property (or parcels) evaluated and the conclusions of the survey.

b. The property identification (e.g., address, assessor parcel number, legal description).

c. Any relevant information obtained from a detailed search of Federal Government records pertaining to the property, including available maps.

d. Any relevant information obtained from a review of the recorded chain of title documents regarding the real property. The review should address those prior ownerships/uses that could reasonably have contributed to an environmental concern, and, at a minimum, cover the preceding 60 years.

e. A description of past and current activities, including all past and current DoD and non-DoD uses to the extent such information is

response action is required, or a response action has been completed); or

3. The property contains some level of contamination by hazardous substances or petroleum products, and hazardous substance notice will be given of the type and quantity of such hazardous substances or petroleum products, and the time at which storage for one year or more, release, treatment or disposal took place. However, this property can be used pursuant to the proposed lease, with the specified use restrictions in the lease, with acceptable risk to human health or the environment and without interference with the environmental restoration process. (The specific lease restrictions on the use of the parcel to protect human health and the environment and the environmental restoration process will be listed in the FOSL.)

IV. PROCEDURES AND RESPONSIBILITIES

A. Regulatory agencies will be notified at the initiation of the EBS and the FOSL. The process of development of these documents will be designed to assure that regulators are provided adequate opportunity to express their views. Regulators will be provided with workable draft documents as they become available. Regulatory comments received during the development of these documents will be reviewed and incorporated as appropriate. Any unresolved regulatory comments will be included as attachments to the EBS or the FOSL.

B. As required by CERCLA Section 120(h)(5), DoD shall notify the state prior to entering into any lease that will encumber the property beyond the date of termination of DoD's operations. These notifications shall include the length of lease, the name of lessee, and a description of the uses that will be allowed under the lease of the property. At National Priorities List (NPL) sites, DoD shall provide this notification to the United States Environmental Protection Agency (EPA) as well.

C. The DoD Components will provide public notice of signing the FOSL; will retain the signed FOSL, including all regulatory comments and responses on the EBS and/or FOSL, in the transaction file (and the Administrative Record, where applicable); and will make the FOSL available to the public upon request.

over the parcel, retained in the transaction file and made available to the public upon request.

H. Amendments, renewals or extensions of leases shall not require a new EBS or FOSL, or an updating of them, unless the leased premises change substantially or the permitted uses of them are to change in environmentally-significant ways.

NOTE: USE THE FOLLOWING PROVISION 6. IF THE LEASED PROPERTY IS PART OF A NATIONAL PRIORITIES LIST (NPL) SITE; ADAPT TO CLEANUP AGREEMENTS TO SUIT CLEANUPS UNDER STATE REGULATORY AUTHORITIES (E.G., A NON-NPL SITE).

6. The Government acknowledges that [insert name of military installation] has been identified as a National Priority List (NPL) Site under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended. The Lessee acknowledges that the Government has provided it with a copy of the [insert name of military installation] Federal Facility Agreement (FFA) entered into by the United states Environmental Protection Agency (EPA) Region [insert number], the state of [insert name of state], and the Military Department and effective on [insert date], and will provide the Lessee with a copy of any amendments thereto. The Lessee agrees that should any conflict arise between the terms of such agreement as it presently exists or may be amended ("FFA," "Interagency Agreement" or "IAG") and the provisions of this Lease, the terms of the FFA or IAG will take precedence. The Lessee further agrees that notwithstanding any other provision of the Lease, the Government assumes no liability to the Lessee or its sublessees or licensees should implementation of the FFA interfere with the Lessee's or any sublessee's or licensee's use of the Leased Premises. The Lessee shall have no claim on account of any such interference against the United States or any officer, agent, employee or contractor thereof, other than for abatement of rent.

NOTE: USE THE FOLLOWING PROVISION 7. IF A FEDERAL FACILITIES AGREEMENT (FFA) OR INTERAGENCY AGREEMENT (IAG) APPLIES TO THE PROPERTY BEING LEASED (E.G., AN NPL SITE).

7. The Government, EPA, and the [insert name of state agency] and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Lessee and any sublessee, to enter upon the Leased Premises for the purposes enumerated in this subparagraph and for such other purposes consistent with any provision of the FFA:

(a) to conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, test-pitting, testing soil borings and other activities related to the [insert name of military installation] Installation Restoration Program, FFA or IAG;

(b) to inspect field activities of the Government and its contractors and subcontractors in implementing the [insert name of military installation] IRP, FFA or IAG;

practicable, be coordinated with representatives designated by the Lessee and any sublessee. The Lessee and sublessees shall have no claim on account of such entries against the United states or any officer, agent, employee, contractor, or subcontractor thereof. In addition, the lessee shall comply with all applicable Federal, state, and local occupational safety and health regulations.

9. The Lessee further agrees that in the event of any assignment or sublease of the Leased Premises, it shall provide to the EPA and [insert name of state agency] by certified mail a copy of the agreement or sublease of the Leased Premises (as the case may be) within fourteen (14) days after the effective date of such transaction. The Lessee may delete the financial terms and any other proprietary information from the copy of any agreement of assignment or sublease furnished pursuant to this condition.

10. The Lessee shall strictly comply with the hazardous waste permit requirements under Resource Conservation and Recovery Act, or its [insert name of state] equivalent. Except as specifically authorized by the Government in writing, the Lessee must provide at its own expense such hazardous waste management facilities, complying with all laws and regulations. Government hazardous waste management facilities will not be available to the Lessee. Any violation of the requirements of this condition shall be deemed a material breach of this Lease.

11. DoD Component accumulation points for hazardous and other wastes will not be used by the Lessee or any sublessee. Neither will the Lessee or sublessee permit its hazardous wastes to be commingled with hazardous waste of the DoD Component.

12. The Lessee shall have a Government-approved plan for responding to hazardous waste, fuel, and other chemical spills prior to commencement of operations on the leased premises. Such plan shall be independent of [insert name of installation] and, except for initial fire response and/or spill containment, shall not rely on use of installation personnel or equipment. Should the Government provide any personnel or equipment, whether for initial fire response and/or spill containment, or otherwise on request of the Lessee, or because the Lessee was not, in the opinion of the said officer, conducting timely cleanup actions, the Lessee agrees to reimburse the Government for its costs.

13. The Lessee shall not construct or make or permit its sublessees or assigns to construct or make any substantial alterations, additions, or improvements to or installations upon or otherwise modify or alter the leased premises in any

Department : ARMY
Option Package : CA11-2R
Scenario File : C:\COBRA\CA11-2R.CBR
Std Fctrs File : C:\COBRA\SF7DEC.SFF
PERSONNEL SUMM FOR: DETRICK
PERSONNEL REALIGNMENTS:
From Base: FORT RITCHIE, MD

	1996	1997	1998	1999	2000	2001	Total
Officers	0	0	0	47	0	0	47
Enlisted	0	0	0	555	0	0	555
Students	0	0	0	0	0	0	0
Civilians	0	0	0	334	0	0	334
TOTAL	0	0	0	936	0	0	936

TOTAL PERSONNEL REALIGNMENTS (Into FORT DETRICK, MD):

	1996	1997	1998	1999	2000	2001	Total
Officers	0	0	0	47	0	0	47
Enlisted	0	0	0	555	0	0	555
Students	0	0	0	0	0	0	0
Civilians	0	0	0	334	0	0	334
TOTAL	0	0	0	936	0	0	936

BASE POPULATION (After BRAC Action):

Officers	Enlisted	Students	Civilians
263	1,142	3	3,288

PERSONNEL SUMMARY FOR: FORT RITCHIE, MD

BASE POPULATION (FY 1996):

Officers	Enlisted	Students	Civilians
89	941	0	[illegible]027

FORCE STRUCTURE CHANGES:

	1996	1997	1998	1999	2000	2001	Total
Officers	0	-4	-8	0	0	0	-12
Enlisted	0	-3	-4	0	0	0	-7
Students	0	0	0	0	0	0	0
Civilians	0	-34	-115	0	0	0	-149
TOTAL	0	-41	-127	0	0	0	-168

BASE POPULATION (Prior to BRAC Action):

Officers	Enlisted	Students	Civilians
77	934	0	[illegible]878

PERSONNEL REALIGNMENTS:
To Base: FORT HUACHUCA, AZ

TO HUACHUCA

	1996	1997	1998	1999	2000	2001	Total
Officers	0	0	7	0	0	0	7
Enlisted	0	0	101	0	0	0	101
Students	0	0	0	0	0	0	0
Civilians	0	0	166	0	0	0	166
TOTAL	0	0	274	0	0	0	274

MIL 108 CIV 166

To Base: FORT DETRICK, MD

TO DETRICK

	1996	1997	1998	1999	2000	2001	Total
Officers	0	0	0	47	0	0	47
Enlisted	0	0	0	555	0	0	555
Students	0	0	0	0	0	0	0
Civilians	0	0	0	334	0	0	334
TOTAL	0	0	0	936	0	0	936

602 334

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Environmental Data 2.11

NONSTRUCTURAL ATTRIBUTES

Fort Monmouth -- 34555

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		1,097
	(a) Main.Post	637	
	(b) Charles Wood Area	460	
(2)	Cantonment area		1,005
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area		80
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.		12

b. Air Space.

(1)	Restricted Air Space.	N/A
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. However, no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Fort Monmouth in the early 1980's.

b. The historic structure report recommended that 104 buildings be nominated to the National Register of Historic Places. Of these buildings, 79 are contained on the main post and the Charles Wood area. The remainder are either on the Evans area (BRAC 93 disposal) or have been demolished.

c. No archeological surveys have been conducted for this installation. The archeological overview found that Fort Monmouth lands are extremely disturbed and have only a low potential for possessing intact archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with the New Jersey American Water Company. There are no contract restrictions and the average daily use is 0.69 MGD. The capacity of the Fort Monmouth distribution system is 4.17 MGD.

b. Wastewater.

Wastewater discharge is accomplished under contract with the Northeast Monmouth County Regional Sewage Authority. The average daily effluent is 0.65 MGD. The capacity of the collection system is 5.4 MGD. The sewage authority has recently implemented a ban on new sewer connections until a newly expanded plant obtains a permit to operate at a new capacity.

c. Solid Wastes.

Forty-two percent of the Fort Monmouth solid waste stream is recycled under contract to the base operations commercial activities contractor, E-Systems. The remaining solid waste is handled by contract and hauled to the Monmouth County Reclamation Center. The average disposal amount is about 8 tons/day at a cost of $68.70/ton.

5. AIR QUALITY.

a. The air quality region is Monmouth County.

b. The area is not in attainment for ozone (severe) and nitrogen oxide (severe).

c. Air pollution sources are boilers, emergency generators, gas stations, storage tanks, dust collectors, and vehicular traffic.

d. The installation has no air emission credits.

e. Major air compliance projects have been identified on the installation.

f. Fort Monmouth reported that there are no critical air quality regions within 100 km of the installation.

g. Based on 1993 air emissions inventory, Fort Monmouth exceeds the New Jersey DEPE emission statement reporting limits for nitrogen oxide and volatile organic compounds. However, Fort Monmouth is currently converting from oil fired boilers to natural gas, which should reduce emissions.

e. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

A preliminary assessment to determine contamination has been conducted, however no Defense Environmental Restoration Account (DERA) sites were identified despite the presence of seven landfills.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 84 contaminated transformers were identified. All 32 PCB Class contaminated transformers (>499 ppm) have been replaced. The remaining 52 contaminated transformers (50 - 499 ppm) are still in use.

A wall to wall asbestos survey was conducted at Fort Monmouth and was completed in November 1992. Approximately 2.9 million square feet of buildings and structures located at the Main Post, Charles Wood Area and Evans Area were surveyed.

Fort Monmouth previously reported that a lead paint survey in family housing and child care facilities was to occur in FY 93.

Fort Monmouth conducted a radon survey for all priority one buildings in 1989. Test data revealed radon levels are within acceptable limits.

d. Underground Storage Tanks (UST).

There are 193 active USTs remaining on Fort Monmouth, of which one is abandoned. A total of 105 USTs are not in use, 11 have been tested and passed, and 45 have been replaced with above ground storage tanks.

e. Radioactive Materials and Sources.

The installation holds three Nuclear Regulatory Commission (NRC) licenses for research and development for training and instrument calibrations and irradiation of materials for purposes of research and development. These materials are in use at the Evans area, scheduled for disposal as a result of BRAC 93. Some of the radioactive sources will be moved to the Charles Wood area. Decommissioning requirements are currently under study for inclusion in the BRAC 93 Decommissioning Plan.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$2,510,000	$ 115,000
FY 95	$3,077,000	$ 160,000
FY 96	$2,077,000	$ 0
FY 97	$1,540,000	$ 0
FY 98	$ 919,000	$ 0
FY 99	$ 863,000	$ 0
	$10,986,000	$ 275,000

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	$ 900,000	$ 0
FY 95	$ 0	$ 0
FY 96	$ 0	$ 0
FY 97	$ 0	$ 0
FY 98	$ 0	$ 0
FY 99	$ 0	$ 0
	$ 900,000	$ 0

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

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NONSTRUCTURAL ATTRIBUTES

Fort Detrick -- 24225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total		1143
(2)	Cantonment area		311
(3)	Maneuver area		0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring		0
(5)	Firing Ranges		0
(6)	Non-Impact Firing Range		0
(7)	Wetlands Sec 404 area (22 acres of wetlands; 4 acres of which are surface water and might be outside Sec 404 jurisdiction.)		22
(8)	Other		810
	Mission (various tenants)	274	
	Landfill	87	
	Habitat	30	
	Recreation	108	
	Leased land & other open space	311	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zones (NAPZ)	0

Fort Detrick has an emergency helicopter landing pad. The only current restrictions are related to safe landing approaches. Noise measurements were taken by USAEHA, and it has been concluded that the noise environment for the entire installation is compatible with residential use.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No Federal survey has been conducted. The US Fish and Wildlife Service has documented that no threatened or endangered species are present on or near the facility, and no Biological Assessment is required.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan that has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been completed. Three buildings are on the Historic Register, along with one object. A 19th Century Lime Kiln (object) is eligible. Two other buildings appear eligible when they are included as a group with the three buildings already on the register, as part of a historic property, or "historic district". One building will require extensive renovation (historic barn).

c. Phase 1 Archeological Survey of the entire post, 1,143 acres has been completed. No artifacts discovered were of sufficient size or importance to warrant curation. All artifacts are labeled and identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water is treated surface water. Filters are the limiting process and have a capacity of 4.25 MGD. Average daily use is 1.37 MGD. Units were built between 1945 and 1969. Mechanisms are repaired or replaced as needed. A renovation project of the filter units in 1994 will increase their capacity to 7.0 MGD. Transmission capacity is limited to 4.25 MGD, but could easily be increased by construction of a water pumping station at the main post and/or an additional water main to the main post. With proper maintenance, and properly timed replacements/renovations of key units, this plant should be able to remain in operation for 25 or more years.

b. Wastewater.

The treatment plant design capacity is 2.0 MGD with an average daily use of 0.925 MGD. The plant was built in 1945 and upgraded throughout the following years. The last major renovation was in 1979. Mechanisms are repaired and/or replaced as needed. Permit parameters include mass loadings. With increased flow, lower effluent concentrations could be required. With proper maintenance this plant can be used for 20 or more years.

c. Solid Wastes.

Installation has an approved landfill of 60.9 acres, of which 6.5 acres are currently operating (at a cost of $54.42/short ton). The total remaining capacity is 600,000 tons, with an estimated usable life of 31.1 years. Beyond the approved landfill, there is no available land on Fort Detrick that is suitable for a landfill.

5. AIR QUALITY.

a. The installation is in the Central Maryland Air Quality Control Region (Area II).

b. The region is in non-attainment for Ozone/(NOX). (Serious)

c. The boiler plants are the most significant source of air pollution. There also exists an incineration facility, but it is not considered a significant source of emissions.

d. The installation maintains no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. The installation is not located within 100 km of any critical air quality regions.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has no Resource Conservation and Recovery Act (RCRA) permitted hazardous waste treatment, storage or disposal facilities.

b. Contaminated Sites.

Numerous studies have been performed in the past. The latest is the development of the Remedial Investigation Workplan by a contractor through Army Environmental Center (AEC). There are two known Defense Environmental Restoration Account (DERA) eligible contaminated sites. Further investigation is included in the RI Workplan. The other sites are only possible contamination.

c. PCB, Asbestos, Lead Paint, or RADON.

PCB survey has been completed. The last PCB transformer was removed in 1990.

d. Underground Storage Tanks (UST).

Of the 29 active tanks, 17 have been tested. The remaining tanks are exempt from testing. Only one tank failed a test and it has been replaced.

e. Radioactive Materials and Sources.

There are three Nuclear Regulatory Commission (NRC) licenses in effect. The USAMRIID Nuclear Regulatory Commission (NRC) license 19-11831-01 is for possession and use of by-product material in sealed sources for irradiation of materials in which the source is not removed from its shield. The USAMRIID Nuclear Regulatory Commission (NRC) license 19-11831-03 is for possession and use of by-product for research and development. The USAG NRC license 19-01151-02 is for radiation waste brokerage for Fort Detrick tenants: US Army Medical Research Institute of Infectious Diseases; US Department of Agriculture; and Frederick Cancer Research and Development Center (National Institute of Health). The USAMRIID currently maintains 4 buildings utilizing 117 laboratories for their licensed activities. Decommissioning would require survey and if necessary, clean-up of all radiological use areas. The USAG has only one building, the radiological waste processing and storage facility, requiring decommissioning. In order to decommission, the waste compactor, wall surfaces and 4800 sq ft of floor surface would be surveyed and cleaned. Also the following items would have to be disposed as waste: the sink used to discharge aqueous liquids, internal piping, PVC piping leading to the manhole outside of the building, approx. 50 feet of 6 inch sewer leading to the sanitary sewer line, four 500 gallon tanks used to decay liquids, associated piping and pumps. Assessments of the need to dispose of the 8 inch sewer line as radiological waste also needs to be completed.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are two revenue generating programs, Agricultural and Grazing, which generated the following:

FY 92	$2,651.08
FY 93	$2,651.08
FY 94	$2,651.08
	$7,953.24

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	Funded	Unfunded
FY 94	$689K	359K
FY 95	448K	58K
FY 96	258K	425K
FY 97	381K	195K
FY 98	476K	89K
FY 99	206K	0
	$2,458K	1,126K

b. Summary of environmental restoration costs:

	Funded	Unfunded
FY 94	0	$2,009K
FY 95	0	$ 500K
FY 96	0	$1,500K
FY 97	-	-
FY 98	-	-
FY 99	-	-
	$ 0	$4,009K

ACRONYMS

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DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
200 ARMY PENTAGON
WASHINGTON DC 20310-0200

REPLY TO
ATTENTION OF

April 24, 1995

Ms. Deirdre Nurre
Defense Base Closure and
Realignment Commission
1700 North Moore Street
Suite 1425
Arlington, VA 22209

Dear Ms. Nurre:

The attached data is being provided in response to your request from your meeting last week with TABS's Environmental Manager, Mr. Joseph Vallone. The environmental work sheets are for the section on Air Quality, specifically for the installations you requested, Fort Monmouth and Fort Detrick. Please feel free to contact TABS should you require any additional assistance.

Point of Contact for this action is Mr Joseph Vallone, (703) 614-6513.

MICHAEL G. JONES
COL, GS
Director, TABS

Attachment

CLEAN AIR CONFORMITY REVIEW

RECEIVING INSTALLATION: ***Fort MONMOUTH, NJ***

1. BRAC 95 Bayonne recommendation - sends approximately 650 personnel (MTMC HQ) to Fort Monmouth. This action generates a construction requirement at Fort Monmouth for 130k sqft Admin facility and a 24k sqft General storage facility.

2. BRAC 95 ATCOM recommendation - sends approximately 170 personnel (Communications) to Fort Monmouth. This action generates a construction requirement at Fort Monmouth for 33k sqft Admin facility.

3. Fort Monmouth is in an area classified as severe non-attainment of the ozone National Ambient Air Quality Standard (NAAQS). Pollutants of concern for the area are volatile organic compounds (VOCs) and Nitrogen Oxides (NOx). Fort Monmouth area is also designated "unclassified" with respect to carbon monoxide (CO) NAAQS. The pollutant CO is localized to the city of Frehold, NJ. Fort Monmouth does not fall within the region of this problem. The Environmental Review Committee (ERC) analysis finds that a majority of the personnel (and associated vehicles emissions) moving (Bayonne)to Fort Monmouth are from the same ozone non-attainment area. Therefore, there would be no increase in emissions for the non-attainment area. Emissions from the operation of newly constructed facilities would be minor. While emissions increase allowed is relatively low (25 tons per year VOC or NOx), it is unlikely that this threshold will be broken or that extraordinary controls would be required to comply. Also, the proposed BRAC actions will not exceed the CO threshold of 100 tons per year.

The above assessment was made within the time frame and data available. However, we understand that conformity analysis, required by 40 CFR 51 and 93, must be performed before these BRAC actions are implemented.

CLEAN AIR CONFORMITY REVIEW

RECEIVING INSTALLATION: ***Fort DETRICK***

1. BRAC 95 Fort Ritchie recommendation - sends approximately 940 personnel (Signal BN/BDE) to Fort Detrick. This action generates a construction requirement at Fort Detrick for 355 houses, 212 UEPH spaces (2 bldgs), a 38k sqft Admin facility and a 13k sqft General storage facility.

2. Fort Detrick is in an area classified as serious non-attainment of the ozone National Ambient Air Quality Standard (NAAQS). Pollutants of concern for the area are volatile organic compounds (VOCs) and Nitrogen Oxides (NOx). The Environmental Review Committee (ERC) analysis finds that Fort Ritchie is not in the same non-attainment area as Fort Detrick. Impacts for consideration are emissions from increased on-post traffic, the new facilities, and the method of providing heat for the new construction. Emissions from these BRAC actions have not been studied in detail. However, it is unlikely that the threshold (50 tons per year VOCs or NOx) will be exceeded or that extra ordinary controls would be required to comply.

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what's the threshold?
what sort of assumptions do u use amount of VOC or NO_x which are generated by 940 personnel moving to Detrick?
what round by route?

Riparian 4-
Monitoring Forest included in COBRA model →

IF it's not priced in to boss cost or cost avoided
it's not included.

EIS's, EA's, environ cleanup versus

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3.8.94

To: Sylvia Davis Thompson

From: Deirdre Nurre

RE: Additional Questions for March 16 Reuse Hearing

Thru: Bob Cook

In the wake of the recent hearings with the services, I've thought of a few more questions to ask. I'm forwarding them on to you. I'm sure that additional questions will occur to me before the hearing. I'll continue to submit additional items to you.

To retrieve these questions and the last group of questions I sent you, pull up the following document: h:\nurre\doc\reuseq.doc.

I. Question for community members:

(Question addressed to the entire panel):
Many closing bases which have leased or transferred property up to this point have relied on one major tenant as a focus for the reuse -- for example, the Cal State University campus at Fort Ord in Monterey, California, or the Packard Bell industrial property at the former Sacramento Army Depot in California.

In your view, does securing a primary focal tenant spur the reuse plan for the entire base, and is it vital for reuse groups to secure a major focus tenant?

Are there significant reasons to take the alternative approach and start with a broad representation of smaller local tenants?

(City Manager of Vallejo):

[Mr. City Manager], Mare Island Naval Shipyard has been participating in a unique experiment in employing former Shipyard workers to complete a share of the environmental work on the base.

Given your knowledge of how other cleanups in California are progressing, would you say that the type of effort which Mare Island has piloted to give preferences to displaced workers should be implemented elsewhere?

What are the factors at the Mare Island shipyard which make this program successful?

Question for DoD:

Secretary Goodman, the February 23, 1995 GAO report on environmental cleanup at closing military bases stated that difficulty in obligating funds in a timely way was one significant reason why funds directed to clean up closing installations had not yet been spent for this purpose.

Now that the Fast-Track Cleanup Program is well underway, have you seen improvements in this area?

What more needs to be done to spend the appropriated funds more effectively?

Question for the Army:

Secretary Walker, the reuse of several Army facilities which are closing nationally is limited by the existence or potential existence of unexploded ordnance on the property. As of this date, the Army has not taken action on these sites under the environmental cleanup laws in CERCLA and RCRA.

If the Army does not take action under such laws, what alternative cleanup options are available?

Why might alternative options be preferable to clearing the property under the CERCLA or RCRA environmental programs?

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March 2, 1995

To: Air Force, Army, Navy, Cross-Service Team Leads

From: Deirdre Nurre, Environmental Analyst

RE: Questions for March 6 & 7 Hearing for "Environmental Impact/Restoration Issues"

The following questions are updates to the environmental questions we submitted to Chairman Dixon for March 1. To oblige David Lyles' request for fewer questions, and to make sure that the important ones will be asked, I'm forwarding to a re-draft of the environmental questions for you to consider. I've shortened the list of questions and place them in a different priority order. I hope these will assist you in developing your final package.

To retrieve these questions directly, invoke **h:\nurre\doc\servques.doc.**

ENVIRONMENTAL IMPACT/RESTORATION ISSUES

1. Secretary X, according to DOD guidance, "environmental restoration costs at closing bases are not to be considered in cost of closure calculations." Were any installations eliminated from closure consideration because of the high cost of environmental cleanup?

2. Secretary X, did the overall cost of environmental restoration at all bases proposed for closure affect the size of the list presented to the Commission?

3. Secretary X, DOD policy also states that "unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse." Were any installations eliminated from closure consideration due to unique contamination problems? If so, please elaborate.

4. Secretary X, DOD began its "Fast Track Cleanup" program eighteen months ago to speed cleanup on closing bases.

Does "Fast Track Cleanup" cause the (Air Force/Army/Navy) to clean up a closing base sooner than if the base were to remain open?

Do costs of cleanup increase because the cleanup is on the fast track? If so, should cost of cleanup be considered in cost of closure calculations?

5. Secretary X, as the (Air Force/Army/Navy) made its closure and realignment decisions, what role did environmental compliance play in your analysis?

For example, did the fact the a base's expansion potential is limited by environmental restrictions play a major role in the analysis?

Were bases in Clean Air Act or other non-attainment areas viewed differently from those in attainment areas?

6. Secretary X, how many installations recommended for closure in this or prior rounds are expected to have substantial portions of land placed into caretaker status due to unique contamination problems?

How long are such caretaker costs accounted for under base closure funding?

ENVIRONMENTAL IMPACT/RESTORATION ISSUES

1. Secretary Perry, according to your policy guidance, "environmental restoration costs at closing bases are not to be considered in cost of closure calculations." Your policy further states that "unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse."

Were any installations not recommended for closure or realignment due to unique contamination problems? If so, please elaborate.

2. Secretary Perry, were any installations eliminated from closure consideration because of the high cost of environmental cleanup?

3. Secretary Perry, how many installations recommended for closure in this or prior rounds are expected to have substantial portions of land placed into caretaker status due to unique contamination problems?

How long are such caretaker costs accounted for under base closure funding?

4. Secretary Perry, did the overall cost of environmental restoration at closure bases, which is a budget factor in closing bases even though it is not a decision factor, limit the size of the list presented to the Commission?

ENVIRONMENTAL IMPACT/RESTORATION ISSUES

2. Secretary Perry, according to your policy guidance, "environmental restoration costs at closing bases are not to be considered in cost of closure calculations." ~~Your policy further states that~~ "unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse."

Were any installations not recommended for closure or realignment due to unique contamination problems? If so, please elaborate.

DoD guidance states that

Secretary Perry's ~~[illegible]~~ was quoted on Monday in

& 1. Secretary Perry, were any installations eliminated from closure consideration because of the high cost of environmental cleanup?

the LA Times stated that built into costs of closure in the '95 round is ~~[illegible]~~ $1.8 bil.

3. Secretary Perry, how many installations recommended for closure in this or prior rounds are expected to have substantial portions of land placed into caretaker status due to unique contamination problems?

How long are such caretaker costs accounted for under base closure funding?

4. Secretary Perry, did the overall cost of environmental restoration at closure bases, which is a budget factor in closing bases even though it is not a decision factor, limit the size of the list presented to the Commission? doesn't this ask the same thing as Question #2 above?

Given that DoD was focused on costs of closure for the long haul at costs of closure

Meaning, property kept by the military after the date of closure?

5. Secretary Perry, in the 1993 round, one community pointed out that the cost of cleaning up an installation directed to close could be three to ten times as great as the cost of cleaning up an active installation. This difference is due to expected technological advances in environmental restoration.

Mr. Secretary, do you believe the difference between routine and closure related cleanup costs, if factual, should be considered in cost of closure calculations?

6. Secretary Perry, could you describe any efforts by DoD or the Environmental Protection Agency to establish variable levels of environmental cleanup, tied to specific plans for reuse? not as much of an issue.

7. Secretary Perry, in making closure decisions what role did environmental compliance play in your analysis?

For example, did the fact that a base's expansion potential is limited by environmental restrictions play a major role in the analysis?

Were Bases in Clean Air Act non-attainment areas viewed differently from those in attainment areas?

State is entitled about a workshare arrangement - see how they & can piggy back off our work.

CA gets a huge part of DSMOA.

~~Capital~~ important that cmtl gets.

~~[redacted]~~ Is the DSMOA fig distributed ≠ all states work with DoN?

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DRAFT

ENVIRONMENTAL IMPACT ISSUES

1. Secretary Widnall, did you or the Office of the Secretary of Defense remove any installations from the recommendations solely for reasons of environmental impact?

Please elaborate.

2. Secretary Widnall, according to DoD guidance, "environmental restoration costs at closing bases are not to be considered in cost of closure calculations." DoD policy further states that "unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse."

Were any bases excluded due to unique contamination problems? Please elaborate.

3. Despite DoD guidance, the act of closing a base may cause the Air Force to clean up the affected base sooner than it would have had it remained open. Is the requirement to clean up a base accelerated if it is closed? Should this be considered? Please elaborate.

Were any installations eliminated from closure consideration because of high cost of environmental cleanup?

Did it have an effect on the number of closures? How was impact assessed? Please elaborate.

4. Secretary Widnall, in making closure and realignment decisions, what role did environmental compliance play in your analysis?

For example, did the fact that a base's expansion potential is limited by environmental restrictions play a major role in the analysis?

DRAFT

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3/1/95

Perry Deutch Gotbaum et al

ALL public documents & decisionmaking is open.

Reduce infrastructure in a way that will value in portfolio infrastructure

Perry:
No adverse effects on treaties. No adverse effects on other gov't groups. Econ: Cumulative across all 3 BRACs. "This is the list which was made to me by the services."
Assessing Net present value of bases.
Community - Environmental were not used in calculating net present value.

looking at how to make Depots more efficient. AF chose & make reduction in size in all.

CA: 26,000 prior BRACS / 3,900 jobs this BRAC. "No geographic bias" - The State which was hit hardest in prior rounds were spared this time around.

2 Guam facilities → HI; Anderson → ~~Guam~~ HI / west coast. Would this create perception that we don't want to be in South Pacific? Shifts bases around makes military sense, but does it hurt arms control commitments?

Perry: O/A → why backed off of 15%?

Original hope: BRAC III close enough to balance force structure. Not succeed. Perry wants a BRAC V. Managing downsizing is hardest job. ~~DOD~~
Lots of efforts & to do in BRAC 91. "This is as big a lump as we can swallow right now." This isn't a small BRAC. The guidance & the services was very specific and often involved specific bases.

We still have excess infrastructure - Once by dust settles, we'll still have work & do. Significant opportunity for further consolidation.
We have managed the process, we have not manipulated the process.
It hurts Democrats & Repub's equally - we don't request that regions be spared - "we have & be able & digest what's already on our plate -

"Because of job losses in Guam & CA, DON decided not & have add'l closures that would have made sense otherwise." This is a smaller

Principal analysis was not on a state but on a regional area analysis.

Ⓐ Choosing not & close a depot ~~[illegible]~~ in AF because of

EQ's: 1) DoD didn't involve. This q. should be presented & each service staff
2) Answer: no.
3) ? Don't know. Will provide for record. Dixon: The was new emphasis $$ appropriated for env. cleanup. Deutsch: we pay attn & all of them. Major concern & Bill Perry & yourself - environmental cleanup & address
4) No. 3.8B for prior rounds. We don't know about this round. It will be very significant. (??) → only 2 NPL sites.

Question re: BENS report - of 67 bases agreed to close; over 1/3 now closed or reopened under another name. Deutsch: ~~the~~ Prompt reuse is a priority. Fast pace of turnover.

Perry Deutch Gotbaum et al 3/1/95 (2)

what's the cost to the taxpayer of maintaining excess infrastructure above what we need - what's hanging around after BRAC IV?

Q: How do you guys do cumm econ impact? A: Based on past BRAC action.

Decision to leave out California was a policy decision. It's not based on SSMA's.

How vibrant is / has been the economy in an area? DoD looked at this.

~~As with the~~

Q was any decision made to downsize, rather than close, due to econ considerations? A: I don't think so...

Navy employed an extra "economic screen." This is what caused Navy to pull back some CA & GU sites due to econ impact.

Q: which OPN sites were ~~added~~ subid in once CA & GU sites removed?

Q: Did you do the limit of what was needed to do in depots? A: we still have excess capacity...

Air Force: downsizing all depots versus closing one - why weren't they doing? why wouldn't that analysis ∆ the figures.

DRAFT

GENERAL BACKGROUND

1. Secretary Perry, in January 1994, you put out guidance to the military services that stated: "For the 1995 base closure round, the goal is to further reduce the overall DoD domestic base structure by a minimum of 15 percent of DoD-wide plant replacement value"-- a level of reductions that would be approximately equal to the 1988, 1991, and 1993 rounds combined.

In December, you stated in an interview concerning the 1995 closure round that: "We don't have goals as to what the size should be. ...But I think it's reasonable to expect that the 1995 round is going to be approximately comparable in size to the last one."

In January, you noted in a speech to the US Conference of Mayors that the 1995 round of base closings "will not be as large as the last one, not because we don't need to close more bases from the point of view of saving infrastructure, but simply because in the previous three closure rounds we have closed all of the bases that were relatively easy to close."

Mr. Secretary, can you tell us what caused you to alter your original guidance to the Services regarding the closure of 15% of the plant replacement value and how you determined the size of the base closure list you are presenting to the Commission this morning?

2. General Shalikashvili, in your view when the 1995 base closure and realignment proposal is combined with the closures and realignments of previous rounds, is there an appropriate balance between the general drawdown of forces and base infrastructure?

3. Secretary Perry, you were quoted in the press last month as saying that even after this year's closure process is finished, the nation will have more bases than it needs to support the scaled-down military of tomorrow.

If the Commission, the President, and the Congress endorsed the list of closures and realignments that you are presenting today, would there still be excess capacity in the Defense Department's basing structure?

Would the Services still have more bases than needed in the future to support the force levels in your force structure plan?

4. Secretary Perry, to your knowledge, were any of the closure or realignment recommendations submitted to you by the Services changed by your office?

If so, which ones and for what reasons?

5. Secretary Perry, did your office instruct the Services to exclude certain installations as they developed their recommendations?

If so, which ones and for what reasons?

6. Secretary Perry, did the Services provide your staff with their approaches for determining excess capacity, and if so, were these approaches adequately documented and reasonable in your opinion?

7. Secretary Perry, the Fiscal Year 96 Defense budget proposal includes civilian personnel reductions totaling 38,300 in 1996 and 137,500 through 2001 in accordance with your expressed desire to expand the civilian drawdown to match the percentage of active duty reductions.

Mr. Secretary, how have these proposed civilian personnel reductions affected the number and specific type of installations on the closure and realignment list?

8. Secretary Perry, some communities have expressed concern that not all communities are receiving the same level of assistance from local base officials as they prepare their rebuttals to closure or realignment. One community says that their base officials have received orders to provide no assistance.

Is there a DoD policy that restricts base officials from providing assistance to communities as they prepare positions or materials to present to the Commission?

9. Secretary Perry, how do you answer critics who say that by leaving excess infrastructure in place you have joepardized the future ability of the Services to train and to modernize their forces--particularly since there is not another round of base closings authorized under the current law?

FORCE STRUCTURE

1. General Shalikashvili, would you review for this Commission the force structure that was used in developing this year's base closure and realignment recommendations?

2. General Shalikashvili, recognizing that our national military strategy remains in a state of transition, are you satisfied that sufficient capacity has been retained to support the potential need for a more robust force structure in the future?

3. Secretary Perry, was any consideration given to consolidating and realigning smaller bases or functions to those larger bases which were essentially exempt from closing because of their strategic location?

4. General Shalikashvili, are there any functional areas with excess capacity that you recommended not be considered by your staff or the Services because changes in the basing structure might preclude future force structure or roles and missions changes?

5. General Shalikashvili, are you and the Joint Warfighting Commanders-in-Chief satisfied that the basing infrastructure that remains provides sufficient mobilization and deployment capabilities to support a two Major Regional Conflict scenario with the force structure that has been programmed in the Fiscal Year 96 budget proposal?

6. General Shalikashvili, will the basing infrastructure that is being proposed today be sufficient to support any probable restationing of forward deployed forces, in terms of available land, usable facilities, and necessary training facilities and ranges?

7. General Shalikashvili, has a region by region force projection analysis, such as an analysis of our ability to respond to contingencies in the Caribbean, revealed any significant loss of responsiveness as a result of the proposals you are presenting today?

8. General Shalikashvili, on July 8, 1994 Deputy Secretary Deutch issued instructions to the Secretary of the Air Force and to you regarding the operation of the runway at MacDill AFB. In those instructions, the Secretary directed the Air Force to continue operating the runway until October 1, 1995 and for you to prepare a report stating once and for all the operational requirements of the Central Command and the Special Operations Command for an operating runway at MacDill AFB.

General, do the Joint commands actually require an operational runway at MacDill AFB for their direct mission support?

General, are you comfortable that the Air Force plans for operation of the MacDill AFB airfield will satisfy your requirements once and for all?

9. Secretary Perry, during the 1993 Commission proceedings, testimony was received from former Ambassador Rowny, among others, that the intercontinental ballistic missile field at Grand Forks AFB must be retained because of its proximity to the sole Anti-Ballistic Missile site in the United States. That testimony, and correspondence to the Commission since, indicated that any dismantling or change in operational status of Grand Forks AFB or its missile field would jeopardize, not only the Anti-Ballistic Missile Treaty itself, but also any ongoing negotiations in this matter.

Mr. Secretary, would closure of the Grand Forks missile field jeopardize the Anti-Ballistic Missile Treaty?

10. Secretary Perry, did the Air Force or your staff exclude FE Warren AFB from consideration because of Peacekeeper missile basing?

DRAFT

JOINT CROSS-SERVICE ISSUES

1. Secretary Perry, what impact did the work of the Joint Cross-Service Groups that you set up last year have on the final recommendations that you are presenting here this morning?

2. Secretary Perry, in May 1994 the Vice Chairman of the Joint Chiefs of Staff, Admiral Owens, recommended to the Deputy Secretary of Defense that the Services be required to incorporate the recommendations of the Joint Cross-Service Groups into their base closure recommendations. The Deputy Secretary elected not to require this of the Services.

Mr. Secretary, why wasn't the Joint Chiefs of Staff recommendation accepted?

3. General Shalikashvili, did the Joint Chiefs, the Joint Warfighting Commanders-in-Chief and the Joint Staff have any role in developing or critiquing the work of the Joint Cross-Service Groups?

Are you satisfied that the Services have consolidated some of their common functions as much as they need to or as much as they can?

4. Secretary Perry, in June of 1993 the Secretary of Defense and the Chairman of the Joint Chiefs of Staff asked the Commission not to address fixed wing aviation depots separately from other interservicing issues. They asked instead for the opportunity to come forward with comprehensive interservicing recommendations in 1995.

Are you satisfied, Mr. Secretary, that your recommendations in the area of fixed wing aviation depots represent a comprehensive approach to the problems of interservicing and excess capacity in this area?

5. Secretary Perry, the Air Force has had five major air logistics centers since the Vietnam Era. In the 1993 round, the Air Force recommended the closure of one of these five depots, but that depot was removed from the list by the Secretary of Defense. This year with the same selection criteria and a smaller force structure plan there is once again no Air Force depot on the list.

On what basis did you determine that the Air Force continues to need five air logistics centers?

6. Secretary Perry, in 1993 both the General Accounting Office and the Commission were critical of DoD for not making more progress in consolidating common functions across the Services. Your January 1994 guidance to the Services stated: "It is the DoD policy to make maximum use of common support assets. DoD components should, throughout the 1995 base closure analysis process, look for cross-service or intra-service opportunities to share assets and look for opportunities to rely on a single Military Department for support."

Mr. Secretary, in your view, do the recommendations you are presenting today represent a significant step forward in terms of consolidating common functions--such as depot maintenance, research labs, and test and evaluation facilities--across the Services?

7. Secretary Perry, are you satisfied that your interservicing recommendations to the Commission remove most or all of the excess capacity in each of the five Cross-Service study areas?

If there are areas where this is not the case, please explain why not?

DRAFT

COST TO CLOSE

1. Secretary Perry, the proposed Fiscal Year 1996 budget you presented to Congress last month represents a reduction of almost $6 billion, or 5.3 percent in real terms, from the Fiscal Year 1995 level, and it includes $785 million to begin implementing the 1995 closures in Fiscal Year 1996.

Was the size of the 1995 closure and realignment list that you are presenting today limited by your ability to budget adequate up-front closing costs to carry out these closures beginning in Fiscal Year 1996?

2. Secretary Perry, the Future Year Defense Program proposed by the Administration last month relies on savings from the 1995 round of closures and realignments to round out the defense budget beginning in the late 1990s. How significant would the budget shortfall be if these savings are not realized?

3. Secretary Perry, there are reports that the cost to close bases and the time required to recover those costs from previous rounds are significantly greater than anticipated.

Is this accurate, and what steps have you directed to ensure that cost and savings estimates are realistic for the 1995 round?

4. Secretary Perry, your report to us uses the results of Cost of Base Realignment Actions (COBRA) analyses to project the anticipated costs and savings that would result from implementing your recommendations.

Recognizing that the figures used in the COBRA analyses are not budget quality, how accurate do you believe the projections are?

How closely have the figures in the COBRA analyses prepared in 1991 and 1993 compared to the actual costs for closures?

DRAFT

ECONOMIC ISSUES

1. Secretary Perry, for the 1993 closure round your staff established cumulative economic impact thresholds that resulted in the removal of at least one installation from the Service recommendations by your staff. Were any similar cumulative economic thresholds set for the 1995 round?

2. Secretary Perry, you have been quoted as saying that you would "try to avoid having any one state suffer inordinately as a result of the closure process." Was any installation removed from or added to a Service list primarily because of economic impact, including cumulative economic impact, within a state or a community?

3. Secretary Perry, in calculating cumulative economic impact, how did DoD differentiate between economic impacts caused by previously announced force structure changes and those that were due to closure or realignment decisions?

4. Secretary Perry, was DoD reluctant to close major industrial, laboratory, or test & evaluation installations because of economic impact?

Was any decision taken to downsize, rather than close an installation, as a result of economic impact considerations?

ENVIRONMENTAL IMPACT/RESTORATION ISSUES

1. Secretary Perry, according to your policy guidance, "environmental restoration costs at closing bases are not to be considered in cost of closure calculations." Your policy further states that "unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse."

Were any installations not recommended for closure or realignment due to unique contamination problems? If so, please elaborate.

2. Secretary Perry, were any installations eliminated from closure consideration because of the high cost of environmental cleanup? Perry: no.

3. Secretary Perry, how many installations recommended for closure in this or prior rounds are expected to have substantial portions of land placed into caretaker status due to unique contamination problems?

How long are such caretaker costs accounted for under base closure funding?

4. Secretary Perry, did the overall cost of environmental restoration at closure bases, which is a budget factor in closing bases even though it is not a decision factor, limit the size of the list presented to the Commission?

DRAFT

MEDICAL ISSUES

1. Secretary Perry, military medical facilities play an important role in terms of both readiness for war and in supporting the force during peacetime. For families of military members, retirees and their families, and survivors, the local military hospital is often of particular importance. Military medical assets are also important from a Department budget point of view, in their ability to reduce Civilian Health and Medical Program for the Uniformed Services costs. However, the fate of military hospitals is often tied to larger closure and realignment decisions about the installations on which they are located.

Mr. Secretary, what guidance did the Department provide to the Services and to the Joint Cross-Service Groups to ensure that decisions that impact military hospitals and military beneficiaries are made in consideration of those impacts?

2. Secretary Perry, in 1993 the Commission made specific recommendations to the Department regarding improvements in health care operations and increased cost effectiveness.

Mr. Secretary, did you direct your Assistant Secretary for Health Affairs to examine the consolidation of resources across military departments?

What was the outcome of that examination?

How is that examination reflected in the Departments new list of recommended closures and realignments?

3. Secretary Perry, in developing the current list, did you direct the Services to consider closing military hospitals that are not cost effective, given their patient load and the cost a

GENERAL BACKGROUND

1. Secretary Perry, in January 1994, you put out guidance to the military Services that stated: "For the 1995 base closure round, the goal is to further reduce the overall DoD domestic base structure by a minimum of 15 percent of DoD-wide plant replacement value"-- a level of reductions that would be approximately equal to the 1988, 1991, and 1993 rounds combined.

In December, you stated in an interview concerning the 1995 closure round that: "We don't have goals as to what the size should be. ...But I think it's reasonable to expect that the 1995 round is going to be approximately comparable in size to the last one."

In January, you noted in a speech to the US Conference of Mayors that the 1995 round of base closings "will not be as large as the last one, not because we don't need to close more bases from the point of view of saving infrastructure, but simply because in the previous three closure rounds we have closed all of the bases that were relatively easy to close."

Mr. Secretary, can you tell us what caused you to alter your original guidance to the Services regarding the closure of 15% of the plant replacement value and how you determined the size of the base closure list you are presenting to the Commission this morning?

2. General Shalikashvili, in your view when the 1995 base closure and realignment proposal is combined with the closures and realignments of previous rounds, is there an appropriate balance between the general drawdown of forces and base infrastructure?

3. Secretary Perry, you were quoted in the press last month as saying that even after this year's closure process is finished, the nation will have more bases than it needs to support the scaled-down military of tomorrow.

If the Commission, the President, and the Congress endorsed the list of closures and realignments that you are presenting today, would there still be excess capacity in the Defense Department's basing structure?

In what general areas is there still excess capacity?

Would the Services still have more bases than needed in the future to support the force levels in your force structure plan?

4. Secretary Perry, to your knowledge, were any of the closure or realignment recommendations submitted to you by the Services changed by your office?

If so, which ones and for what reasons?

5. Secretary Perry, did your office instruct the Services to exclude certain installations as they developed their recommendations?

If so, which ones and for what reasons?

6. Secretary Perry, did the Services provide your staff with their approaches for determining excess capacity, and if so, were these approaches adequately documented and reasonable in your opinion?

7. Secretary Perry, the Fiscal Year 96 Defense budget proposal includes civilian personnel reductions totaling 38,300 in 1996 and 137,500 through 2001 in accordance with your expressed desire to expand the civilian drawdown to match the percentage of active duty reductions.

Mr. Secretary, how have these proposed civilian personnel reductions affected the number and specific type of installations on the closure and realignment list?

8. Secretary Perry, some communities have expressed concern that not all communities are receiving the same level of assistance from local base officials as they prepare their rebuttals to closure or realignment. One community says that their base officials have received orders to provide no assistance.

Is there a DoD policy that restricts base officials from providing assistance to communities as they prepare positions or materials to present to the Commission?

9. Secretary Perry, since this the last round of closures and your list is somewhat smaller than originally planned, how much excess infrastructure will continue to exist?

10. Secretary Perry, how do you answer critics who say that by leaving excess infrastructure in place you have joepardized the future ability of the Services to train and to modernize their forces--particularly since there is not another round of base closings authorized under the current law?

FORCE STRUCTURE

1. General Shalikashvili, would you review for this Commission *the national military strategy and* the force structure that *were* used in developing this year's base closure and realignment recommendations?

2. General Shalikashvili, recognizing that our national military strategy remains in a state of transition, are you satisfied that sufficient capacity has been retained to support the potential need for a more robust force structure in the future?

3. Secretary Perry, was any consideration given to consolidating and realigning smaller bases or functions to those larger bases which were essentially exempt from closing because of their strategic location?

4. General Shalikashvili, are there any functional areas with excess capacity that you recommended not be considered by your staff or the Services because changes in the basing structure might preclude future force structure or roles and missions changes?

5. General Shalikashvili, are you and the Joint Warfighting Commanders-in-Chief satisfied that the basing infrastructure that remains provides sufficient mobilization and deployment capacity to support a two Major Regional Conflict scenario?

6. General Shalikashvili, will the basing infrastructure that is being proposed today be sufficient to support any probable restationing of forward deployed forces, in terms of available land, usable facilities, and necessary training facilities and ranges?

7. General Shalikashvili, has a region by region force projection analysis, such as an analysis of our ability to respond to contingencies in the Caribbean, revealed

any significant loss of responsiveness as a result of the proposals you are presenting today?

8. General Shalikashvili, *according to the 1995 DoD base closure report, you have validated the airfield requirements for the two Unified Commands at MacDill AFB and have determined that the Air Force should take responsibility for supporting those requirements. During the 1991 and 1993 rounds, the Joint Staff was unable to validate those requirements.*

Can you explain what has changed to permit validation now?

Are you completely satisfied with the recommendation for the Air Force to operate the airfield at MacDill?

9. *Secretary Perry, you have proposed inactivating the 321st Missile Group (150 Minuteman III missiles) at Grand Forks AFB, unless you determine prior to December 1996 that " the need to retain Ballistic Missile Defense options effectively precludes this action."*

What has prevented an earlier decision on the need to retain these options that would have enabled the Commission to act on a definitive recommendation?

If the Commission eliminates the 91st Missile Group (150 Minuteman III missiles) at Minot AFB from consideration for inactivation, and simply directs inactivation of the 321st Missile Group at Grand Forks AFB, how will Ballistic Missile Defense options be affected?

10. Secretary Perry, did the Air Force or your staff exclude FE Warren AFB from consideration because of Peacekeeper missile basing?

JOINT CROSS-SERVICE ISSUES

1. Secretary Perry, what impact did the work of the Joint Cross-Service Groups that you set up last year have on the final recommendations that you are presenting here this morning?

2. Secretary Perry, in May 1994 the Vice Chairman of the Joint Chiefs of Staff, Admiral Owens, recommended to the Deputy Secretary of Defense that the Services be required to incorporate the recommendations of the Joint Cross-Service Groups into their base closure recommendations. The Deputy Secretary elected not to require this of the Services.

Mr. Secretary, why wasn't the Joint Chiefs of Staff recommendation accepted?

3. General Shalikashvili, did the Joint Chiefs, the Joint Warfighting Commanders-in-Chief and the Joint Staff have any role in developing or critiquing the work of the Joint Cross-Service Groups?

Are you satisfied that the Services have consolidated some of their common functions as much as they need to or as much as they can?

4. Secretary Perry, in June of 1993 the Secretary of Defense and the Chairman of the Joint Chiefs of Staff asked the Commission not to address fixed wing aviation depots separately from other interservicing issues. They asked instead for the opportunity to come forward with comprehensive interservicing recommendations in 1995.

Are you satisfied, Mr. Secretary, that your recommendations in the area of fixed wing aviation depots represent a comprehensive approach to the problems of interservicing and excess capacity in this area?

5. Secretary Perry, the Air Force has had five major air logistics centers since the Vietnam Era. In the 1993 round, the Air Force recommended the closure of one of these five depots, but that depot was removed from the list by the Secretary of Defense. This year with the same selection criteria and a smaller force structure plan there is once again no Air Force depot on the list.

On what basis did you determine that the Air Force continues to need five air logistics centers?

6. Secretary Perry, in 1993 both the General Accounting Office and the Commission were critical of DoD for not making more progress in consolidating common functions across the Services. Your January 1994 guidance to the Services stated: "It is the DoD policy to make maximum use of common support assets. DoD components should, throughout the 1995 base closure analysis process, look for cross-service or intra-service opportunities to share assets and look for opportunities to rely on a single Military Department for support."

Mr. Secretary, in your view, do the recommendations you are presenting today represent a significant step forward in terms of consolidating common functions--such as depot maintenance, research labs, and test and evaluation facilities--across the Services?

7. Secretary Perry, are you satisfied that your interservicing recommendations to the Commission remove most or all of the excess capacity in each of the five Cross-Service study areas?

If there are areas where this is not the case, please explain why not?

COST TO CLOSE

1. Secretary Perry, given that the list is smaller than initially planned, how much will DoD have to plus up the budget to accommodate reduced savings in the late 1990s.

2. Secretary Perry, the Future Years Defense Program proposed by the Administration last month relies on savings from this round of closures to round out the defense budget beginning in the late 1990s. *What changes will you make to reduce costs if these savings are not realized?*

3. 1. Secretary Perry, the proposed Fiscal Year 1996 budget you presented to Congress last month represents a reduction of almost $6 billion, or 5.3 percent in real terms, from the Fiscal Year 1995 level, and it includes $785 million to begin implementing the 1995 closures in Fiscal Year 1996.

Was the size of the 1995 closure and realignment list that you are presenting today limited by your ability to budget adequate up-front closing costs to carry out these closures beginning in Fiscal Year 1996?

4. Secretary Perry, there are reports that the cost to close bases and the time required to recover those costs from previous rounds are significantly greater than anticipated.

Is this accurate, and what steps have you directed to ensure that cost and savings estimates are realistic for the 1995 round?

5. Secretary Perry, your report to us uses the results of Cost of Base Realignment Actions (COBRA) analyses to project the anticipated costs and savings that would result from implementing your recommendations.

Recognizing that the figures used in the COBRA analyses are not budget quality, how accurate do you believe the projections are?

How closely have the figures in the COBRA analyses prepared in 1991 and 1993 compared to the actual costs for closures?

ECONOMIC ISSUES

1. Secretary Perry, for the 1993 closure round your staff established cumulative economic impact thresholds that resulted in the removal of at least one installation from the Service recommendations by your staff. Were any similar cumulative economic thresholds set for the 1995 round?

2. Secretary Perry, you have been quoted as saying that you would "try to avoid having any one state suffer inordinately as a result of the closure process." Was any installation removed from or added to a Service list primarily because of economic impact, including cumulative economic impact, within a state or a community?

3. Secretary Perry, in calculating cumulative economic impact, how did DoD differentiate between economic impacts caused by previously announced force structure changes and those that were due to closure or realignment decisions?

4. Secretary Perry, was DoD reluctant to close major industrial, laboratory, or test & evaluation installations because of economic impact?

Was any decision taken to downsize, rather than close an installation, as a result of economic impact considerations?

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1. Secretary Perry, according to your policy guidance, "environmental restoration costs at closing bases are not to be considered in cost of closure calculations." Your policy further states that "unique contamination problems requiring environmental restoration will be considered as a potential limitation on near-term community reuse."

Were any installations not recommended for closure or realignment due to unique contamination problems? If so, please elaborate.

2. Secretary Perry, were any installations eliminated from closure consideration because of the high cost of environmental cleanup?

3. Secretary Perry, how many installations recommended for closure in this or prior rounds are expected to have substantial portions of land placed into caretaker status due to unique contamination problems?

How long are such caretaker costs accounted for under base closure funding?

4. Secretary Perry, did the overall cost of environmental restoration at closure bases, which is a budget factor in closing bases even though it is not a decision factor, limit the size of the list presented to the Commission?

5. Secretary Perry, in the 1993 round, one community pointed out that the cost of cleaning up an installation directed to close could be three to ten times as great as the cost of cleaning up an active installation. This difference is due to expected technological advances in environmental restoration.

Mr. Secretary, do you believe the difference between routine and closure related cleanup costs, if factual, should be considered in cost of closure calculations?

6. Secretary Perry, could you describe any efforts by DoD or the Environmental Protection Agency to establish variable levels of environmental cleanup, tied to specific plans for reuse?

7. Secretary Perry, in making closure decisions what role did environmental compliance play in your analysis?

For example, did the fact that a base's expansion potential is limited by environmental restrictions play a major role in the analysis?

Were Bases in Clean Air Act non-attainment areas viewed differently from those in attainment areas?

MEDICAL ISSUES

1. General Shalikashvili, given that wartime medical requirements far exceed those of peacetime, is there enough medical infrastructure remaining to support our two Major Regional Conflict strategy?

2. Secretary Perry, military medical facilities play an important role in terms of both readiness for war and in supporting the force during peacetime. For families of military members, retirees and their families, and survivors, the local military hospital is often of particular importance. Military medical assets are also important from a Department budget point of view, in their ability to reduce Civilian Health and Medical Program for the Uniformed Services costs. However, the fate of military hospitals is often tied to larger closure and realignment decisions about the installations on which they are located.

Mr. Secretary, what guidance did the Department provide to the Services and to the Joint Cross-Service Groups to ensure that decisions that impact military hospitals and military beneficiaries are made in consideration of those impacts?

3. Secretary Perry, in 1993 the Commission made specific recommendations to the Department regarding improvements in health care operations and increased cost effectiveness.

Mr. Secretary, did you direct your Assistant Secretary for Health Affairs to examine the consolidation of resources across military departments?

What was the outcome of that examination?

How is that examination reflected in the Departments new list of recommended closures and realignments?

4. Secretary Perry, in developing the current list, did you direct the Services to consider closing military hospitals that are not cost effective, given their patient load and the cost and availability of medical care in their communities?

5. Secretary Perry, did you direct the Services to move medical assets, including moving them across Service lines, in order to increase the capability and usage of military medical facilities?

6. Secretary Perry, during the development of the current list, did you direct the Services to review their policy of closing military hospitals when bases served by those hospitals are closed?

What was the result of that review?

Have you ensured that the most cost effective means of delivering care to all beneficiaries are maintained, irrespective of other base closure actions?

BUSINESS EXECUTIVES FOR NATIONAL SECURITY REPORT

1. Secretary Perry, in October 1994 Business Executives for National Security (BENS) issued a report ,"Uncovering the Shell Game," which criticized the Department's record in actually closing military facilities. "60 Minutes" featured the report later in the year. The essence of the report and the "60 Minutes" characterization was that "of the 67 bases the President, Congress and the Pentagon have agreed to shut down thus far, over one-third never closed or have quietly reopened under a new name or function." As you know, Mr. Secretary, we plan on offering recommendations to the President concerning reuse and future closure actions. Reports such as the BENS report detract from general support for the closure process.

Mr. Secretary, please give us your comments on the BENS report.

2. Secretary Perry, The Defense Finance and Accounting Service (DFAS) is currently slated to consolidate its 300+ offices at the 5 centers it currently operates (Denver, Columbus, Kansas City, Indianapolis, Cleveland). It also has plans to add 21 new sites, many of which will be on installations slated to close as a result of previous base closure rounds. Our staff's analysis of the Business Executives for National Security report indicates that of the 26 bases noted in the report as being "reopened," 14 were operating reasonably close to the recommendations of the Commission, and the other 12 were recipients of DFAS centers.

Please explain why DoD plans to place 12 of the 21 new DFAS offices on bases which are slated to close rather than on bases remaining open which have existing excess capacity.

3. Secretary Perry, about one-third of the 21 new Defense Finance and Accounting Service (DFAS) sites have yet to open. There is a Military Construction requirement for nearly $200 million to make improvements to many of these sites.

In light of the ongoing consolidation efforts taking part in other parts of DoD, would it be worthwhile to consider further reductions in the number of Defense Finance and Accounting Service (DFAS) sites?

FUTURE BASE CLOSURES AND REALIGNMENTS

1. Secretary Perry, as you know this is the final round of expedited base closures and realignments authorized under the Defense Base Closure and Realignment Act of 1990.

Once this round is completed, the Defense Department will go back to operating under the section of Title 10, United States Code, that required DoD to conduct extensive budgetary, strategic, economic, and environmental studies of a potential closure affecting more than 300 civilians, or a realignment affecting more than 50 percent of an installation's civilian workforce, before proposing such a closure or realignment.

I think we can all agree that it is almost impossible to close or realign a military base under this authority.

This Commission plans to make recommendations on a process for closing or realigning military bases in the future, after this 1995 round is completed.

Mr. Secretary, do you have any suggestions in this area for us to consider?

CROSS SERVICE

1. Mr. Gotbaum, we understand that five functional cross Service groups, reporting to you, were established to develop closure and realignment alternatives with a... "strong emphasis on cross-service utilization of common support assets".

Please outline for the Commission the interservicing and consolidation proposals emerging from your Cross Service groups and list those that were included in the DoD's recommended list of closures and realignments

Did OSD conduct an independent analysis of cross service opportunities after the Services forwarded their recommendations to OSD on 17 February? If so, what did this analysis conclude?

2. Mr. Gotbaum, to your knowledge, were any installations removed by either your office or those of the Service secretaries for other than military value reasons?

3. Mr. Gotbaum, the Joint Cross Service groups calculated functional value scores in addition to military value scores. Please describe how the functional categories were determined and how the score was calculated. What was the relative importance of the functional value scores to the military value scores when determining closure or realignment recommendations?

4. Mr. Gotbaum, what was the role of the Steering Group (BRAC 95) that you chair, compared with that of the Review Group (BRAC 95) chaired by the Under Secretary of Defense (Acquisition and Technology)?

5. Mr. Gotbaum, what was your role in the Cross Service decision process, beyond setting standards and guidelines?

6. Mr. Gotbaum, why were the joint cross service group recommendations passed back to the Military Departments for their consideration rather than included as part of the OSD base closure deliberation process?

7. Mr. Gotbaum, please discuss any Joint Cross Service study areas where the joint study groups made one or more scenario recommendations to the Services, but the Services did not adopt any recommendation in that study area.

8. Mr. Gotbaum, over time it has been pointed out that service parochialism and the unwillingness of the Services to relinquish control over their assets has resulted in significant excess capacity costing billions of dollars. Does the Department's interservicing recommendation to the Commission remove even a majority of the excess capacity in all or any of the five functional cross service study areas?
Please discuss those areas where this was not the case and explain.

9. Mr. Gotbaum, are there any of those Cross Service areas where you specifically need the Commission's assistance in eliminating the "too tough" excess capacity?

10. Mr. Gotbaum, the Commission is not chartered to determine force structure nor set policy, yet we are obliged to recommend the necessary infrastructure to support your force structure and policies.

In March of 1993 the Secretary of Defense literally put the "Ball" in the Commission's "Court" to make such recommendations yet in June of 1993 the Secretary and Chairman of the Joint Chiefs asked the Commission not to slice our a vital piece of the interservicing pie to enable the Secretary to come forward with a comprehensive interservicing recommendation in 1995.

In that regard, does your published policy support interservicing and cross service initiative to the extent that the Commission could recommend further infrastructure reductions accommodating interservicing of areas such as depots, laboratories, test and evaluation, hospitals and undergraduate pilot training?

11. Mr. Gotbaum, I understand that the Department's Joint Cross-Service Groups' alternatives to the Service Secretaries were neither sound nor objective because the groups were composed of officers who protected their Service's parochial interests. For example, the groups responsible to your office for determining alternatives for closing and realigning Research, Development, Test, and Evaluation facilities reported to the Service Secretaries vice your office and used different standards to determine requirements and capacities; even though some of the facilities perform all of the functions. While both groups based their evaluations on functions, the research and development laboratory facilities group used direct labor hours vice the test and evaluation facilities group which used test hours.

Moreover, the teams contained Service members closely associated with the RDT&E facilities and they unduly influenced the outcome of their evaluations to protect the status quo. As a result, your recommendations to the Commission this morning do not contain those necessary to achieve The minimum goal of a 15 percent reduction in the overall DoD-wide plant based on replacement value. Therefore, the excess facilities, related equipment and capacity costing billions of dollars annually will remain even if all of your recommendations are fully implemented.

Why didn't your office provide the oversight necessary to ensure that the Joint Cross-Service Groups provided sound and objective alternatives to the Service Secretaries?

Why didn't you require the Services to make the recommendation to you to achieve your 15 percent minimum reduction goal in excess plant?

#2

FORCE STRUCTURE

Mr. Gotbaum, since the end of the cold war the DoD has reduced the armed forces by approximately 30 percent. The prior rounds of the base closure process have reduced the size of the DoD infrastructure by approximately 15%. The current Defense Planning Guidance (DPG) and the 1995 BRAC policy guidance set a goal of reducing the infrastructure by an 15 %.

1. Does the 1995 list of recommended closures achieve the goal of a 15 % reduction in infrastructure?

2. If the 15 % reduction will not be achieved through the 1995 Base Closure process, how will the Department achieve the necessary reduction in infrastructure?

frost

#3

BUDGET

Mr. Gotbaum, both the FY 1995 and FY 1996 President's Budget reflects net savings over the FYDP of $6.6 billion for the first three rounds of base closures. The 1996 President's Budget request to the Congress includes a request for $785 million and $824 million FY 96 and FY97 respectively to cover costs for the 1995 Commission closures

1) How do actual costs and savings compare with what had been anticipated in previous budgets?

2) What are the annual costs and savings expected from your recommendations on the 95 round of closures?

3) Why doesn't OSD Comptroller track actual savings and costs?

4) How were the FY 1996 and FY 1997 funding requirements to implement the 1995 Base Closure recommendations derived?

Budget

ROLES AND MISSION AND MISSIONS COMMISSION RECOMMENDATION

1. Mr. Gotbaum, the White Roles and Missions Commission will be finalizing their recommendations early this spring. Some of the recommendations will likely have clear closure implications.

Is the Commission likely to receive an analysis from the Administration of the recommendations emerging from the roles and Mission Commission?

Was there any consideration of the White Roles and Mission Commission Panel recommendations in the Department's Base Closure list?

roles

#5

CROSS SERVICE: PRIVATIZATION

1. Mr. Gotbaum, were there any instances where private sector capabilities and capacity were considered by the Cross Service Groups?

If they were considered, how were the data used in that assessment collected and certified?

If they were not considered, do you have any estimate of the cost to the Defense Department of retaining additional capacity in public and private sector facilities.

2. Mr. Gotbaum, the Defense Department is supporting the necessary consolidation in the defense industry through the innovative approach of sharing with the private firms the documented cost savings that will occur because of the consolidation.

How have you used the insights gained in this process to try to accurately assess the cost savings that will result from public sector consolidation?

3. Secretary Gotbaum, the General Accounting Office has questioned the economics of the Air Force's 1993 recommendation to close their depot in Newark, Ohio and to privatize most of the workload in place. Was there any reconsideration of this recommendation?

Has the concept of privatization in place been considered for any of the current recommendations?

Has private industry commented on the potential creation of new competition in overcrowded markets, that is subsidized by the federal government through the low cost transfer of industrial facilities and equipment to communities for reuse?

private

#6

COSTS

1. Mr. Gotbaum, in the past, in spite of specific DoD guidance, services have used different baselines. For example, the Navy and Air Force used different base years for computing manpower numbers. What have you done to insure a common baseline for analysis among services? Are there any significant dissimilarities among services?

2. Mr. Gotbaum, how did you apply COBRA analysis to cross service groups given the different way of computing costs among services? What were some of the problems and how did you overcome them?

3. Mr. Gotbaum, did DoD factor any costs external to DoD, such as leases, into the analysis? If so, what were they and will all such data be provided to the commission?

cost

#3

Economic Impact

1. Mr. Gotbaum, the new economic data base DoD used to determine economic and cumulative economic impacts of base closures/realignments on affected communities is, I'm told, extensive.

Some installations, such as Air Logistics Centers, have many tenant organizations collocated on the installations. Collectively, the number of workers in these tenants could be significant. Does the DoD data base account for such tenants?

2. Mr. Gotbaum, the President's budget calls for a significant drawdown in the civilian workforce over the next five years. Obviously, less workers would present less of an economic impact for any given installation. Do the DoD numbers analyzed in the economic model reflect these reductions or only current data?

3. Mr. Gotbaum, do the numbers in the COBRA model reflect the same numbers as the economic model does?

4. Mr. Gotbaum, some large installations, such as Air Logistics Centers, have more than one mission such as an industrial function and a flying mission. If these missions were at individual bases, different multipliers would be used. How are they treated by DoD when the missions are collocated? Is a consistent method used?

5. Mr. Gotbaum, would you define cumulative economic impact? How are losses from previous closure rounds captured, is it done specifically or in very general terms? Can impacts from previous closures be differentiated from other negative impacts on the economic area (such as civilian downsizing) or is everything lumped together?

ECC

#8

DEPOT MAINTENANCE

1. Mr. Gotbaum, several years ago, General Went (USMC(ret)) led a study of maintenance depots for the Chairman of the Joint Chiefs which concluded that there was 25-50 percent excess capacity in the depots. The General Accounting Office subsequently reviewed his study and concurred that there was significant excess capacity. More recently, an April 1994 study by the Defense Science Board concluded that the 24 depots remaining after the BRAC 93 closures would collectively have 20 to 30 percent excess capacity. One of the goals of the depot maintenance Joint Cross Service Review Team was to eliminate unnecessary duplication and excess capacity.

Do the closure recommendations that you have submitted result in sufficient elimination of excess capacity?

We understand that the depot cross service group suggested that eight depots should be closed but DoD's list includs three . Would you state for the record, the eight maintenance depots suggested by the joint cross service review group for closure or realignment.

Why weren't the recommendations from the maintenance depot cross service group accepted?

How much excess capacity would be eliminated if the Secretary's list is accepted?

How much more excess capacity would be eliminated if the maintenance depot cross service group recommendations were adopted instead of the Secretary's?

depots

2. Mr. Gotbaum, as you know, excess capacity is one of the primary factors considered by this Commission in deciding whether or not a particular base or activity should be closed or realigned. Based on DoD's guidelines, total depot capacity should be based on the total number of useable workstations. While many DoD depots have downsized over the last few years , workstations placed on layaway should continue to be counted as available useable capacity. An April 1994 study by the Defense Science Board , indicates that the Air Force aviation depots expect to reduce their capacity by more than 4.9 million direct labor hours between fiscal years 1994 and 1997. In comparison, useable capacity for the other 19 depots will remain the same.

Please explain the manner in which the Air Force will reduce the total depot capacity for its aviation depot facilities by an estimated 4.9 million direct labor hours.

Will the Air Force eliminate workstations through permanent divestiture of plant equipment and facilities or will the maintenance capability simply be placed on layaway?

3. Mr. Gotbaum, the Deputy Secretary of Defense stated in a 4 May 1994 memo that private/public and public/public competition for maintenance depot workload would be halted due to DoD's in ability to determine actual costs. The memo also stated that efficiencies in the maintenance function will be achieved through interservicing.

Please describe the workloads that will be done on an interervice basis if the Secretary's recommendations are accepted.

How did interservicing impact the Department's recommendation for maintenance depot closures?

How will interservicing decisions be made if not through competition or the base closure processes?

4. Mr. Gotbaum, the Deputy Secretary of Defense stated in a 4 May 1994 memo that "Core is the capability maintained within organic Defense depots to meet readiness and sustainability requirements....Core depot maintenance capabilities will comprise only the ***minimum facilities, equipment and skill personnel necessary*** to ensure a ready and controlled source of required competence. " (emphasis added)

Will the DoD's base closure list result in the minimum number of facilities to ensure readiness and sustainability? If not, what means other than the Base Closure process will the Department use to implement the Deputy Secretaries direction to achieve the minimum number of depot maintenance facilities?

Did you seek to minimize the number of facilities through use of a two-shift per day operation similar to that used by the private sector? If not, did you study the impact that use of industry standard would have on achieving the Deputy Secretary's May 1994 guidance.

Would additional recommendations have been made in the depot category if the 60-40 public/private work division were not in place?

After the implementation of the proposed closure recommendations, will any of the services retain capacity above their core level? If so, what are the reasons for retaining this capacity?

5. Mr. Gotbaum, in May 1994 the Deputy Secretary of Defense directed all system upgrades and modifications will be performed by the private sector. Furthermore, he directed that new weapon systems will no longer transition to organic DoD maintenance facilities, but instead be supported by the private sector.

What is the impact of these policy changes on workload projections in the future?

Do the Department's base closure recommendations reflect the impact of the workload changes which will result from these policy changes?

6. Mr. Gotbaum, the 1993 Commission report stated that the Commission "...strongly supports a joint organization responsible for assigning workloads to DoD's maintenance depots. Joint oversight could mandate cost effective interservicing actions circumventing Services parochial interests...the Commission recommends the Secretary of Defense consider during his bottom up review of the Department, a single defense depot system with a joint responsibility..."

Has DoD accepted the 1993 recommendation?

If not, why not?

Did the depot maintenance joint cross service group consider this option as part of their analysis? If so what was the result of the analysis?

7. Mr. Gotbaum, an April 1994 study by the Defense Science Board indicates that private sector maintenance facilities could absorb a significant portion of the current organic maintenance depot workload. Accordingly, the Deputy Secretary of Defense in a May 1994 memo stated that only "core" maintenance workload should be conducted within DoD's organic depots. He also established Joint Cross Service Review Teams to analyze outsourcing policies and make recommendations for moving "non core" depot maintenance workload to the private sector.

Please summarize the various types of maintenance work that the Joint Cross Service Review Team considered appropriate for transition to the private sector.

How did the Joint Cross Service Review Team analyze and evaluate costs and benefits of having "non core" maintenance workload transition to the private sector?

How do the Joint Cross Service Review Team recommendations for transitioning depot maintenance workload to the private sector differ from the final recommendations submitted by the Secretary of Defense?

#4

RESEARCH AND DEVELOPMENT LABORATORIES

1. Mr. Gotbaum, I understand that there are 81 research and development laboratories within DoD which are owned and operated by the Services. Their multi-billion dollar annual budgets have declined only slightly in real terms since 1989 and they remain about the same size as during the mid-1980's Cold War peak.

An April 1994 Defense Science Board (DSB) report states that the Defense Laboratory System is an obsolescent artifact of the Cold War which has not kept pace with the shrinking military force structure and changing patterns of technology generation.

The DSB recommended a 20 percent cut in the laboratories' Civil Service personnel in addition to the 4 percent per annum cut directed by Defense Policy Guidance 1995-99. According to a senior DoD official, these cuts will result in a 35 percent reduction in these personnel by the turn of the century.

Why didn't Secretary Perry's BRAC 95 recommendations include a corresponding reduction in laboratory infrastructure?

How is DoD going to eliminate the excess infrastructure?

lab

Test and Evaluation

1. Mr. Gotbaum, as you know, test and evaluation was one of the joint cross-service areas selected for special emphasis during BRAC 95. Several studies and key officials have pointed out that the greatest opportunities for reduction in test and evaluation infrastructure exists in testing of high performance aircraft, electronic warfare systems, weapons and munitions testing, test support aircraft, and selected test and training functions. Since BRAC 95 is not likely to have significant impact on cross servicing, how does the Department plan to reduce its test and evaluation infrastructure?

2. Mr. Gotbaum , how was capacity measured for laboratories and test and evaluation facilities? Was the basic eight hour workday used to measure capacity or were additional measures used, such as a two-shift operation? If a two-shift operation was not used, why not?

3. Mr. Gotbaum, please state for the record the specific consolidation and realignment alternatives proposed by the test and evaluation joint cross service review team.

Medical

1. Mr. Gotbaum, in 1993 the Commission made specific recommendations to the Department regarding improvements in health care operations and increased cost effectiveness. Most of these recommendations relate directly to cross-service issues.

Did your medical JCSG examine the consolidation of resources across military departments?

If so, what was the outcome of that examination?

How were the results of that examination reflected in the Department's new list of recommended closures and realignments?

2. Mr. Gotbaum, in developing the medical JCSG's alternatives, did the Group recommend closing military hospitals that are not cost effective, given their patient load and the cost of medical care in their communities?

3. Mr. Gotbaum, did the Group examine the costs and benefits of moving medical assets, including moving them across Service lines, in order to increase the capability and usage of military medical facilities?

4. Mr. Gotbaum, did you direct the medical JCSG to review the costs and benefits of closing military hospitals when bases served by those hospitals are closed? What was the result of that review? Have you ensured that the most cost effective means of delivering care to all beneficiaries are maintained, irrespective of other base closure actions?

UNDERGRADUATE PILOT TRAINING

1. Mr. Gotbaum , in your view, what are the pros and cons of DOD integrating fully Air Force and Navy Undergraduate Pilot Training (UPT) programs?

2. Did the Undergraduate Pilot Training (UPT) Cross Service Group recommed that any Air Force or Navy UPT bases to close?

3. What elements of the Air Force and Navy UPT programs require Service-specific training?

4. Please discuss any issued DOD or JCS policy regarding cross-servicing of UPT.

5. What is the impact of the Joint Primary Aircraft Trainer (JPAT) on actual basing decisions such as those achieved as a result of the BRAC process?

6. Could final selection of a jet or prop JPAT effect basing decisions?

7. Should JPAT selection criteria, such as that related to take-off and landing and cross-wind requirements, be a factor in basing decisions and if not, why not?

8. How would the subsequent reduction of excess capacity due to consolidation of Air Force and Navy UPT restrict the Services' ability to ramp-up future international pilot production requirements?

#K

Defense Agencies

DISA

In 1993 the Commission realigned a part of the Defense Information Services Agency (DISA) into 16 information procession megacenters. At that time, everyone involved, including DISA realized that there would be excess capacity within the megacenters. We have heard that DISA actually needs only 5 megacenters. To realign, DISA would have to come to the Commission to change the 1993 recommendation.

1. Mr. Gotbaum, given that there is excess capacity within DISA, why are there not recommendations for further consolidation?

DFAS

DFAS is currently slated to consolidate its 300+ offices at the 5 centers it currently operated (Denver, Columbus, Kansas City, Indianapolis, Cleveland). Further, it will add 21 new sites, many of which will be places on installations slated to close as a result of previous BRAC rounds

1. Mr. Gotbaum, please explain why DoD placed most of the 21 new DFAS offices on bases which are slated to close rather than on bases remaining open which have existing excess capacity? I appears that significant money could be saved in such functions as security, grounds maintenance, heat, air conditioning by using existing installations.

2. Mr. Gotbaum, about one-third of the 21 new sites have yet to open. There is a MILCON requirement for nearly $200 million to make improvements to many the sites, particularly among those not yet open. I light of the ongoing consolidation efforts taking part in other parts of DoD, would it be worthwhile to consider further reductions in the number of DFAS sites.

agencies

Document Separator

NPL LIST

U. S. Environmental Protection Agency
OFFICE OF SOLID WASTE and EMERGENCY RESPONSE
Military Base Closure Team
401 M Street, SW, Washington, DC 20460

TO:

Office Location: Diedre Nurre

Office Phone: 703.696.0504
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Number of Pages (Including Cover Page): 6

Date: 3/23/95

FROM: William Mills

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Confidential Notice

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NOTES:

Diedre:

I hope this fax is legible. If not let me know and I can mail it to you or have someone drop it off.

National Priorities List
Federal Facilities Section, Final and Proposed Sites (by State)
February 1995

	St	Site Name	City/County	Date Proposed	Date Final
4	AK	Adak Naval Air Station	Adak	10/92	05/94
	AK	Eielson Air Force Base	Fairbanks N Star Boro	07/89	11/89
	AK	Elmendorf Air Force Base	Greater Anchorage Bor	07/89	08/90
	AK	Fort Richardson (USARMY)	Anchorage	06/93	05/94
	AK	Fort Wainwright	Fairbanks N Star Boro	07/89	08/90
	AK	Standard Steel&Metals Salvage Yard(USDOT	Anchorage	07/89	08/90
		6 Final + 0 Proposed = 6			
	AL	Alabama Army Ammunition Plant	Childersburg	10/84	07/87
	AL	Anniston Army Depot (SE Industrial Area)	Anniston	10/84	03/89
	AL	Redstone Arsenal (USARMY/NASA)	Huntsville	06/93	05/94
		3 Final + 0 Proposed = 3			
	AZ	Luke Air Force Base	Glendale	07/89	08/90
2	AZ	Williams Air Force Base	Chandler	07/89	11/89
	AZ	Yuma Marine Corps Air Station	Yuma	06/88	02/90
		3 Final + 0 Proposed = 3			
	CA	Barstow Marine Corps Logistics Base	Barstow	07/89	11/89
	CA	Camp Pendleton Marine Corps Base	San Diego County	07/89	11/89
2	CA	Castle Air Force Base	Merced	10/84	07/87
	CA	Concord Naval Weapons Station	Concord	02/92	12/94
	CA	Edwards Air Force Base	Kern County	07/89	08/90
3	CA	El Toro Marine Corps Air Station	El Toro	06/88	02/90
2	CA	Fort Ord	Marina	07/89	02/90
1	CA	George Air Force Base	Victorville	07/89	02/90
	CA	Jet Propulsion Laboratory (NASA)	Pasadena	02/92	10/92
	CA	LEHR/Old Campus Landfill (USDOE)	Davis	01/94	05/94
	CA	Lawrence Livermore Lab Site 300 (USDOE)	Livermore	07/89	08/90
	CA	Lawrence Livermore Laboratory (USDOE)	Livermore	10/84	07/87
3	CA	March Air Force Base	Riverside	07/89	11/89
1	CA	Mather Air Force Base	Sacramento	10/84	07/87
	CA	McClellan Air Force Base (GW Contam)	Sacramento	10/84	07/87
2	CA	Moffett Naval Air Station	Sunnyvale	04/85	07/87
1	CA	Norton Air Force Base	San Bernardino	10/84	07/87
	CA	Riverbank Army Ammunition Plant	Riverbank	06/88	02/90
2	CA	Sacramento Army Depot	Sacramento	10/84	07/87
	CA	Sharpe Army Depot	Lathrop	10/84	07/87
	CA	Tracy Defense Depot (USARMY)	Tracy	07/89	08/90
	CA	Travis Air Force Base	Solano County	07/89	11/89
2	CA	Treasure Island Naval Station-Hun Pt An	San Francisco	07/89	11/89
		23 Final + 0 Proposed = 23			
	CO	Air Force Plant PJKS	Waterton	07/89	11/89
	CO	Rocky Flats Plant (USDOE)	Golden	10/84	10/89
	CO	Rocky Mountain Arsenal (USARMY)	Adams County	10/84	07/87
		3 Final + 0 Proposed = 3			
	CT	New London Submarine Base	New London	10/89	08/90
		1 Final + 0 Proposed = 1			
	DE	Dover Air Force Base	Dover	10/84	03/89
		1 Final + 0 Proposed = 1			

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	St	Site Name	City/County	Date Proposed	Date Final
3	FL	Cecil Field Naval Air Station	Jacksonville	07/89	11/89
3	FL	Homestead Air Force Base	Homestead	07/89	08/90
	FL	Jacksonville Naval Air Station	Jacksonville	07/89	11/89
	FL	Pensacola Naval Air Station	Pensacola	07/89	11/89
	FL	Whiting Field Naval Air Station	Milton	01/94	05/94
		5 Final + 0 Proposed = 5			
	GA	Marine Corps Logistics Base	Albany	07/89	11/89
4	GA	Robins Air Force Base(Lf#4/Sludge lagoon	Houston County	10/84	07/87
		2 Final + 0 Proposed = 2			
	GU	Andersen Air Force Base	Yigo	02/92	10/92
		1 Final + 0 Proposed = 1			
	HI	Naval Computer & Telecommunications Area	Oahu	01/94	05/94
	HI	Pearl Harbor Naval Complex	Pearl Harbor	07/91	10/92
	HI	Schofield Barracks (USARMY)	Oahu	07/89	08/90
		3 Final + 0 Proposed = 3			
	IA	Iowa Army Ammunition Plant	Middletown	07/89	08/90
		1 Final + 0 Proposed = 1			
	ID	Idaho National Engineering Lab (USDOE)	Idaho Falls	07/89	11/89
	ID	Mountain Home Air Force Base	Mountain Home	07/89	08/90
		2 Final + 0 Proposed = 2			
	IL	Joliet Army Ammunition Plant (LAP Area)	Joliet	04/85	03/89
	IL	Joliet Army Ammunition Plant (Mfg Area)	Joliet	10/84	07/87
	IL	Sangamo Electric/Crab Orchard NWR (USDOI	Carterville	10/84	07/87
4	IL	Savanna Army Depot Activity	Savanna	10/84	03/89
		4 Final + 0 Proposed = 4			
	KS	Fort Riley	Junction City	07/89	08/90
	KS	Sunflower Army Ammunition Plant	DeSoto	02/95	
		1 Final + 1 Proposed = 2			
	KY	Paducah Gaseous Diffusion Plant (USDOE)	Paducah	05/93	05/94
		1 Final + 0 Proposed = 1			
	LA	Louisiana Army Ammunition Plant	Doyline	10/84	03/89
		1 Final + 0 Proposed = 1			
2	MA	Fort Devens	Fort Devens	07/89	11/89
4	MA	Fort Devens-Sudbury Training Annex	Middlesex County	07/89	02/90
	MA	Hanscom Field/Hanscom Air Force Base	Bedford	05/93	05/94
1	MA	Materials Technology Laboratory (USARMY)	Watertown	06/93	05/94
	MA	Natick Laboratory Army Research,D&E Cntr	Natick	05/93	05/94
	MA	Naval Weapons Industrial Reserve Plant	Bedford	06/93	05/94
	MA	Otis Air National Guard (USAF)	Falmouth	07/89	11/89
4	MA	South Weymouth Naval Air Station	Weymouth	06/93	05/94
		8 Final + 0 Proposed = 8			

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St	Site Name	City/County	Date Proposed	Date Final
MD	Aberdeen Proving Ground (Edgewood Area)	Edgewood	04/85	02/90
MD	Aberdeen Proving Ground(Michaelsville Lf	Aberdeen	04/85	10/89
MD	Beltsville Agricultural Research (USDA)	Beltsville	05/93	05/94
MD	Indian Head Naval Surface Warfare Center	Indian Head	02/95	
MD	Patuxent River Naval Air Station	St. Mary's County	01/94	05/94
	4 Final + 1 Proposed = 5			
ME	Brunswick Naval Air Station	Brunswick	10/84	07/87
2 ME	Loring Air Force Base	Limestone	07/89	02/90
ME	Portsmouth Naval Shipyard	Kittery	06/93	05/94
	3 Final + 0 Proposed = 3			
2 MI	Wurtsmith Air Force Base	Iosco County	01/94	
	0 Final + 1 Proposed = 1			
MN	Naval Industrial Reserve Ordnance Plant	Fridley	07/89	11/89
MN	New Brighton/Arden Hills/TCAAP (USARMY)	New Brighton	12/82	09/83
MN	Twin Cities Air Force Base(SAR Landfill)	Minneapolis	01/87	07/87
	3 Final + 0 Proposed = 3			
MO	Lake City Army Ammu. Plant (NW Lagoon)	Independance	10/84	07/87
MO	Weldon Spring Former Army Ordnance Works	St.Charles County	07/89	02/90
MO	Weldon Spring Quarry/Plant/Pitts(USDOE)	St. Charles County	10/84	07/87
	3 Final + 0 Proposed = 3			
NC	Camp Lejeune Military Res. (USNAVY)	Onslow County	06/88	10/89
NC	Cherry Point Marine Corps Air Station	Havelock	08/94	12/94
	2 Final + 0 Proposed = 2			
NE	Cornhusker Army Ammunition Plant	Hall County	10/84	07/87
	1 Final + 0 Proposed = 1			
1 NH	Pease Air Force Base	Portsmouth/Newington	07/89	02/90
	1 Final + 0 Proposed = 1			
NJ	Federal Aviation Admin. Tech. Center	Atlantic County	07/89	08/90
4 NJ	Fort Dix (Landfill Site)	Pemberton Township	10/84	07/87
4 NJ	Naval Air Engineering Center	Lakehurst	09/85	07/87
NJ	Naval Weapons Station Earle (Site A)	Colts Neck	10/84	08/90
NJ	Picatinny Arsenal (USARMY)	Rockaway Township	07/89	02/90
NJ	W.R. Grace/Wayne Interim Storage (USDOE)	Wayne Township	09/83	09/84
	6 Final + 0 Proposed = 6			
NM	Cal West Metals (USSBA)	Lemitar	06/88	03/89
NM	Lee Acres Landfill (USDOI)	Farmington	06/88	08/90
	2 Final + 0 Proposed = 2			
NY	Brookhaven National Laboratory (USDOE)	Upton	07/89	11/89
3 NY	Griffiss Air Force Base	Rome	10/84	07/87
3 NY	Plattsburgh Air Force Base	Plattsburgh	07/89	11/89

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	St	Site Name	City/County	Date Proposed	Date Final
-4	NY	Seneca Army Depot	Romulus	07/89	08/90
		4 Final + 0 Proposed = 4			
	OH	Air Force Plant 85	Columbus	01/94	
	OH	Feed Materials Production Center (USDOE)	Fernald	07/89	11/89
	OH	Mound Plant (USDOE)	Miamisburg	07/89	11/89
2	OH	Rickenbacker Air National Guard (USAF)	Lockbourne	01/94	
	OH	Wright-Patterson Air Force Base	Dayton	06/88	10/89
		3 Final + 2 Proposed = 5			
	OK	Tinker Air Force(Soldier Cr/Bldg 300)	Oklahoma City	04/85	07/87
		1 Final + 0 Proposed = 1			
	OR	Fremont Nat. Forest Uranium Mines (USDA)	Lake County	06/93	
1	OR	Umatilla Army Depot (Lagoons)	Hermiston	10/84	07/87
		1 Final + 1 Proposed = 2			
4	PA	Letterkenny Army Depot (PDO Area)	Franklin County	04/85	03/89
4	PA	Letterkenny Army Depot (SE Area)	Chambersburg	10/84	07/87
24	PA	Naval Air Development Center(8 Areas)	Warminster Township	06/86	10/89
	PA	Navy Ships Parts Control Center	Mechanicsburg	01/94	05/94
	PA	Tobyhanna Army Depot	Tobyhanna	07/89	08/90
	PA	Willow Grove Naval Air & Air Res. Stn.	Willow Grove	08/94	
		5 Final + 1 Proposed = 6			
	PR	Naval Security Group Activity	Sabana Seca	06/88	10/89
		1 Final + 0 Proposed = 1			
2	RI	Davisville Naval Construction Batt Cent	North Kingston	07/89	11/89
	RI	Newport Naval Education/Training Center	Newport	07/89	11/89
		2 Final + 0 Proposed = 2			
	SC	Parris Island Marine Corps Recruit Depot	Parris Island	08/94	12/94
	SC	Savannah River Site (USDOE)	Aiken	07/89	11/89
		2 Final + 0 Proposed = 2			
	SD	Ellsworth Air Force Base	Rapid City	10/89	08/90
		1 Final + 0 Proposed = 1			
	TN	Arnold Engineering Develop. Ctr. (USAF)	Tullahoma/Manchester	08/94	
4	TN	Memphis Defense Depot (DLA)	Memphis	02/92	10/92
	TN	Milan Army Ammunition Plant	Milan	10/84	07/87
	TN	Oak Ridge Reservation (USDOE)	Oak Ridge	07/89	11/89
		3 Final + 1 Proposed = 4			
	TX	Air Force Plant #4 (General Dynamics)	Fort Worth	10/84	08/90
	TX	Lone Star Army Ammunition Plant	Texarkana	10/84	07/87
	TX	Longhorn Army Ammunition Plant	Karnack	07/89	08/90
	TX	Pantex Plant (USDOE)	Pantex Village	07/91	05/94
		4 Final + 0 Proposed = 4			

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	St	Site Name	City/County	Date Proposed	Date Final
4	UT	Hill Air Force Base	Ogden	10/84	07/87
	UT	Monticello Mill Tailings (USDOE)	Monticello	07/89	11/89
4	UT	Ogden Defense Depot (DLA)	Ogden	10/84	07/87
3	UT	Tooele Army Depot (North Area)	Tooele	10/84	08/90
		4 Final + 0 Proposed = 4			
	VA	Defense General Supply Center (DLA)	Chesterfield County	10/84	07/87
	VA	Fort Eustis (US Army)	Newport News	01/94	12/94
	VA	Langley Air Force Base/NASA Langley Cntr	Hampton	05/93	05/94
	VA	Marine Corps Combat Development Command	Quantico	05/93	05/94
	VA	Naval Surface Warfare - Dahlgren	Dahlgren	02/92	10/92
	VA	Naval Weapons Station - Yorktown	Yorktown	02/92	10/92
		6 Final + 0 Proposed = 6			
	WA	American Lake Gardens/McChord AFB	Tacoma	09/83	09/84
	WA	Bangor Naval Submarine Base	Silverdale	07/89	08/90
	WA	Bangor Ordnance Disposal (USNAVY)	Bremerton	10/84	07/87
	WA	Bonneville Power Admin Ross (USDOE)	Vancouver	07/89	11/89
	WA	Fairchild Air Force Base (4 Waste Areas)	Spokane County	06/88	03/89
	WA	Fort Lewis (Landfill No. 5)	Tacoma	10/84	07/87
	WA	Fort Lewis Logistics Center	Tillicum	07/89	11/89
	WA	Hamilton Island Landfill(USA/COE)	North Bonneville	07/91	10/92
	WA	Hanford 100-Area (USDOE)	Benton County	06/88	10/89
	WA	Hanford 1100-Area (USDOE)	Benton County	06/88	10/89
	WA	Hanford 200-Area (USDOE)	Benton County	06/88	10/89
	WA	Hanford 300-Area (USDOE)	Benton County	06/88	10/89
	WA	Jackson Park Housing Complex (USNAVY)	Kitsap County	06/93	05/94
	WA	McChord Air Force Base (Wash Rack/Treat)	Tacoma	10/84	07/87
	WA	Naval Air Station, Whidbey Is (Seaplane)	Whidbey Island	09/85	02/90
	WA	Naval Air Station, Whidbey Island (Ault)	Whidbey Island	09/85	02/90
BRAC 4	WA	Naval Undersea Warfare Station (4 Areas)	Keyport	06/86	10/89
	WA	Old Navy Dump/Manchester Lab(USEPA/NOAA)	Manchester	01/94	05/94
	WA	Port Madlock Detachment (USNAVY)	Indian Island	06/93	05/94
	WA	Puget Sound Naval Shipyard Complex	Bremerton	05/93	05/94
		20 Final + 0 Proposed = 20			
	WV	Allegany Ballistics Laboratory (USNAVY)	Mineral	06/93	05/94
	WV	West Virginia Ordnance (USARMY)	Point Pleasant	12/82	09/83
		2 Final + 0 Proposed = 2			
	WY	F.E. Warren Air Force Base	Cheyenne	07/89	02/90
		1 Final + 0 Proposed = 1			
		154 Final + 8 Proposed = 162			

Document Separator

April 7, 1995

To: Commissioners
David Lyles
Charlie Smith
Madelyn Creedon
Ben Borden
R & A Team Leads

From: Deirdre Nurre, Interagency Environmental Analyst

Through: Bob Cook, Interagency Team Lead 4/7

RE: ENVIRONMENTAL CLEANUP IMPACTS ON BRAC DECISIONS

Attached is a draft point paper on Environmental Cleanup concepts which may assist Commission members and staff in evaluating environmental data about specific BRAC bases. Please note that the paper is in draft and is distributed for the use of Commission members and staff only.

If you need additional information regarding environmental issues, please contact me at extension 164.

DRAFT: ENVIRONMENTAL CLEANUP IMPACTS ON BRAC DECISIONS

The following points summarize the ideas discussed in this memo.

- Existence of environmental contamination may not necessarily hinder base closure or realignment.
- DoD conducts cleanups on open, closing and realigning bases under CERCLA and RCRA.
- DoD is liable for the most part for current and future cleanup costs.
- DoD's progress on base cleanups to date does not allow total cleanup costs to be accurately quantified.
- Environmental cleanups can be tailored to future land use.
- Defense Environmental Restoration Account (DERA) funds cleanup on bases remaining open while BRAC funds address cleanup on closing bases.
- Clean property on closing bases can be expeditiously identified and transferred.

BACKGROUND ON CERCLA AND RCRA:

Environmental cleanup at closing military installations is conducted under CERCLA (Superfund) authority and under RCRA authority.

In 1980, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed. CERCLA created a trust fund, known as the Superfund, to address the nation's most significant hazardous waste sites. Congress passed CERCLA in response to such dramatic contamination problems as Love Canal, NY, and Times Beach, MO. EPA was given authority to respond to hazardous waste problems using the Superfund, and recover costs from responsible parties to reimburse the Superfund. A list of the most serious sites, the National Priorities List (NPL) was established.

As passed in 1980, CERCLA did not specifically address the federal government's property. In the late 1970's DoD began discovering that it had the same impacts from historical mismanagement of chemical and other waste as private industry. Investigatory work was initiated by DoD in the late 1970's and early 1980's, without formal involvement by regulatory agencies such as EPA.

In 1986 CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA). Importantly for DoD, Section 120 was added, which states that federal agencies must comply with CERCLA in the same manner as everybody else. EPA was required to list federal facilities on the NPL, the authority for the selection of cleanup actions for federal facilities on the NPL was given to EPA, and Interagency Agreements between EPA and federal facilities on the NPL were required. In January, 1987 the President issued Executive Order 12580, which gave the Secretary of Defense the authority to respond to contamination on DoD property. As a rule, DoD pays for cleanups at federal facilities. EPA is prevented from spending money from the Superfund at a DoD facility, unless DoD agrees upfront to reimburse EPA.

Military installations can also perform cleanup activities under the Resource Conservation and Recovery Act (RCRA), which passed in 1976 and amended in 1984. RCRA is designed to provide "cradle-to-grave" control of hazardous waste by imposing management requirements on generators and transporters of hazardous wastes and owners and operators of treatment, storage and disposal facilities. RCRA covers federal and private sites, and applies mainly to active facilities. The military can perform cleanup under the Corrective Action portion of RCRA, which requires owners of facilities to take corrective action for all releases of hazardous waste from solid waste management units at the facility. Such units can be tanks, lagoons, waste piles, and other units found on many military installations. In general, the Corrective Action authority under RCRA is analogous to CERCLA. The military often has some discretion about whether to initiate a cleanup action under CERCLA or RCRA Corrective Action.

CERCLA LIABILITY:

Liability for military base cleanups differs from the far-reaching liability for environmental cleanup which exists for private Superfund sites. DoD has sole liability responsibility for property under its ownership, unless it can be demonstrated that a tenant or outside party caused contamination on the base. To further clarify liability, Congress has mandated that DoD provide indemnification from CERCLA liability for contamination caused by DoD to transferees of property at closing bases, so that future owners will bear no responsibility for cleanup of contamination caused by DoD which is discovered after transfer. Non-DoD tenants and owners of base property will be liable for any additional contamination they cause.

THE CERCLA PROCESS:

DoD follows a stipulated process for identifying, investigating, and cleaning up contamination. This process can be summarized by the following steps specified in CERCLA; the substantially equivalent steps in RCRA are identified in brackets:

1) Preliminary Assessment/Site Inspection, PA/SI - DoD searches for contaminated sites, and determines according to measurable criteria whether there are significant threats to public health

or the environment based on this preliminary information. If these threats exist, EPA adds the facility to the NPL. The relative ranking of facilities on the NPL has little or no meaning. From both DoD and EPA's perspective, if a facility is on the NPL, it is a priority. DoD has stated that non-NPL closing bases shall receive attention and funding equivalent to NPL closing bases, but evidence from closing bases has not yet demonstrated this commitment. It is not uncommon for a PA/SI to be completed, a facility listed on the NPL, and subsequently for numerous additional contaminated sites to be identified. For many DoD facilities much of this phase was completed in the late 70's and early 80's. [RCRA equivalent: RCRA Facility Assessment/Preliminary Assessment and Visual Site Inspection]

2) Remedial Investigation/Feasibility Study (RI/FS) - DoD investigates the extent of contamination and evaluates methods to clean it up. A proposed cleanup action goes through a public comment period. After public comment, a decision is made on the cleanup action to take. This decision includes the standards that the cleanup must meet, which must comply with State requirements. If the site is on the NPL, EPA makes the final decision on how the site is to be cleaned up. The majority of complex environmental problems at DoD facilities are in this stage. Until this stage is completed, estimates of cleanup costs cannot be made with confidence. [RCRA equivalent: RCRA Facility Investigation and Corrective Measures Study]

3) Remedial Design/Remedial Action (RD/RA) - The selected cleanup method, referred to as the remedial action, is designed and implemented. When the implemented action has achieved the selected cleanup standards, the action is complete. For facilities on the NPL, EPA must conclude that cleanup standards have been met prior to delisting the facility from the NPL. [RCRA equivalent: Corrective Measures Design, Corrective Measures Implementation]

It is important to recognize that if at any time during this process (as early as the PA/SI phase), it becomes clear that cleanup work should be initiated, DoD has the authority to take an expedited response without going through the entire process of seeking public comment and gaining regulatory agency concurrence. In fact, it is common for a facility to find that a public water supply is threatened, and take an expedited response (or, "removal") to attempt to prevent contamination of the water supply. EPA encourages these expedited responses by DoD as early in the process as possible, but retains its authority to select the final cleanup standards.

CLEANUP STANDARDS:

Depending on whether a base remains open for military use or is closed and ultimately re-used, cleanup standards are determined as case-by-case decisions. Cleanup levels are often expressed in terms of the ultimate use of the property (commercial, residential, recreational, etc.), and are based on numerical risk estimates.

Cleanup standards may cause cost of cleanup to vary substantially, as the following example indicates. If land is to be re-used for residential purposes, cleanup standards must be set at low concentrations to allow people (especially children) to come into extended, direct contact with soils. This would result in the most stringent standard and the most expensive cleanup. If land is to be used for commercial purposes, short-term exposure by workers to soils

must be considered. Additionally, in many cases, future land owners will want to construct new buildings on the property. The cleanup may need to address soils to a depth of 10 feet in order to protect individuals exposed to soils that are excavated for building foundations. Costs for this action could be significantly less than the residential scenario above. How cleanup standards are selected and the use of risk assessment to determine cleanup decisions are significant items in the current Congressional debate over Superfund reform.

FUNDING FEDERAL FACILITY CLEANUPS:

Federal facility cleanups for bases which are not closing are funded by the Defense Environmental Restoration Account (DERA), an account designated by a congressional appropriation. Compliance money, drawn from base operation and maintenance funds, pays for ongoing environmental compliance activities not related to cleanup. Once a base is approved for closure or realignment, base cleanup activities are paid from environmental restoration funds identified by the military services for each BRAC round and come from the BRAC account. Environmental restoration at BRAC installations may be forced to compete for BRAC funds with other closure-related needs, because although the BRAC account has a statutory floor for environmental expenditures, any expenditures above the floor are not set aside. DERA funds, on the other hand, are "fenced": that is, they are appropriated specifically for environmental restoration and are not available for other DoD uses.

CERCLA AND PROPERTY TRANSFER:

One of the most important requirements in CERCLA impacting closing bases is Section 120(h)(3), which requires that "all remedial action necessary to protect human health and the environment", be taken prior to the deed transfer of property to a party outside the federal government. This provision does not apply to non-deed transfers (leases) or intra-federal government transfers.

In 1992, CERCLA was amended to clarify that this milestone can be met when EPA concludes that the remedial action is in place, and operating pursuant to an approved remedial design. For example, when a ground water extraction and treatment system is necessary to clean up ground water contamination, the property could be transferred after the extraction and treatment system is in place and operating effectively. It is not necessary to wait until cleanup standards are met (which can be decades) prior to the transfer.

It must be noted that very little work at closing bases has reached the Remedial Design/Remedial Action phase, and it will be several years until many bases closed under Rounds I and II can transfer property that has ground water contamination. Typically, actions to address soil contamination will be implemented several years after actions cleaning up ground water. However, recent base cleanups designed to speed reuse have completed both soil and groundwater cleanup in a timely manner, and have allowed large tracts of property at Sacramento Army Depot and Fort Ord (both BRAC 91 closures) to be transferred for reuse.

IF PROPERTY IS CLEAN.....

Many bases, including those on the NPL, contain a significant amount of property which is uncontaminated. The Community Environmental Response Facilitation Act, or CERFA, mandated that the military work with EPA and the states to identify clean property on closing bases which could be readily transferred for reuse. The NPL lists many bases from "fenceline to fenceline", but a significant amount of uncontaminated property has been identified on NPL closing bases. In the future, EPA's nomination of military facilities to the NPL will in many cases forgo the fenceline-to-fenceline approach by listing only the contaminated areas of a base.

BRAC 1995 RECOMMENDATIONS ON THE NATIONAL PRIORITIES LIST (NPL)

The National Priorities List (NPL), sometimes called the Superfund list, contains sites where a release or potential release of hazardous substances poses significant potential risk to human health and the environment. Although thousands of sites across the nation may be eligible for the NPL, the Environmental Protection Agency (EPA) adds to the list only those sites which have been demonstrated to be high priority, based upon a score each site is given using EPA's Hazard Ranking System and upon priority sites identified by states. Most sites on the NPL are or were privately owned, but 154 NPL sites are federal facilities and 101 of these are DoD facilities. NPL federal facilities are cleaned up according to enforceable agreements between the military services, EPA, and the states.

Note that all BRAC 95 facilities will require environmental cleanup regardless of their NPL status, depending upon the degree of contamination. Non-NPL sites are cleaned up under CERCLA (Superfund) or RCRA laws, under agreements with state environmental agencies. EPA has the option of listing a facility on the NPL at any time, so it is possible that a non-NPL BRAC 95 facility may be listed on the NPL in the future.

A total of 17 installations identified in 1995 BRAC recommendations are currently listed on the NPL.

I. MAJOR BASE CLOSURES (6)

Savanna Army Depot Activity, IL
Seneca Army Depot, NY
Naval Air Facility, Adak, AK
Naval Air Station, South Weymouth, MA
Defense Distribution Depot Memphis, TN
Defense Distribution Depot Ogden, UT

II. MAJOR BASE REALIGNMENTS (7)

Fort Dix, NJ
Letterkenny Army Depot, PA
Naval Undersea Warfare Center, Keyport, WA
McClellan Air Force Base, CA
Robins Air Force Base, GA
Tinker Air Force Base, OK
Hill Air Force Base, UT

III. SMALLER BASE CLOSURES AND REALIGNMENTS (1)

Sudbury Training Annex, MA

IV. NPL BASES RECEIVING REDIRECTS FROM PRIOR ROUNDS (3)

Naval Air Station, Jacksonville, FL
Naval Undersea Warfare Center, Keyport, WA
Williams Air Force Base, AZ

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IMPACTS FROM THE SUPERFUND LAW O

Kemmerer NPL paper.
Return to Cook.

BACKGROUND

In 1980, the Comprehe ...nse, Compensation and Liability Act ((...ated a trust fund, known as the Super ...most significant hazardous waste si ... in response to such dramatic contam ... NY, and Times Beach, MO. EPA wa ... to hazardous waste problems using ...osts from responsible parties to reim ... the most serious sites, the Nat... was established.

As passed in 1980, CERCLA did not specifically address the federal government's property. In late 1970's DOD began discovering that it had the same impacts from historical mismanagement of chemical waste as private industry. Investigatory work was initiated by DOD in the late 1970's and early 1980's, without formal involvement by regulatory agencies such as the EPA.

In 1986 CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA). Importantly for DOD, Section 120 was added, which states that federal agencies must comply with CERCLA in the same manner as everybody else. EPA was required to list federal facilities on the NPL, the authority for the selection of cleanup actions for federal facilities on the NPL was given to EPA, and Interagency Agreements between EPA and federal facilities on the NPL were required. In January, 1987 the President issued Executive Order 12580, which gave the Secretary of Defense the authority to respond to contamination on DOD property. As a result of this Order, EPA is prevented from spending money from the Superfund at a DOD facility, unless DOD agrees upfront to reimburse EPA.

THE CERCLA PROCESS

DOD follows a stipulated process for identifying, investigating, and cleaning up contamination pursuant to CERCLA. This process can be summarized by the following steps:

1) Preliminary Assessment/Site Inspection (PA/SI) - DOD searches for contaminated sites, and determines whether there are significant threats to public health or the environment based on this preliminary information. If these threats exist, EPA adds the facility to the NPL. The relative ranking of facilities on the NPL has little or no meaning. From both DOD and EPA's perspective, if a facility is on the NPL, it is a priority. It is not uncommon for a PA/SI to be completed, a facility listed on the NPL, and subsequently for numerous additional contaminated sites to be identified. For many DOD facilities much of this phase was completed in the late 70's and early 80's.

2) Remedial Investigation/Feasibility Study (RI/FS) - DOD investigates the extent of contamination and evaluates methods to clean it up. A proposed cleanup action goes through a public comment period. After public comment, a decision is made on the cleanup action to take. This decision includes the standards that the cleanup must meet, which must comply with State requirements. If the site is on the NPL, EPA makes the final decision on how the site is to be cleaned up. The majority of the work at DOD facilities is in this stage. Until this stage is completed, estimates of cleanup costs cannot be made with confidence.

3) Remedial Design/Remedial Action (RD/RA) - The selected cleanup action is designed and implemented. When the implemented action has achieved the selected cleanup standards, the action is complete. For facilities on the NPL, EPA must conclude that cleanup standards have been met prior to delisting the facility from the NPL.

It is important to recognize that if at any time during this process (as early as the PA/SI phase), it becomes clear that cleanup work should be initiated, DOD has the authority to take an expedited response without going through the entire process of seeking public comment and gaining regulatory agency concurrence. In fact, it is common for a facility to find that a public water supply is threatened, and take a expedited response to attempt prevent contamination of the water supply. EPA encourages these expedited responses by DOD as early in the process as possible, but retains its authority to select the final cleanup standards.

CLEANUP STANDARDS

If a cleanup action is necessary, establishing specific standards for the cleanup is often a case-by-case decision. To illustrate, consider a closing base with contaminated soil with three possible scenarios for setting soil cleanup levels.

1) If land is to be used for residential purposes, cleanup standards must be set at low concentrations to allow people (especially children) to come into extended, direct contact with soils. This would result in the lowest standard, and would be the most expensive cleanup.

2) If land is to be used for commercial purposes, short-term exposure by workers to soils must be considered. Additionally, in many cases, future land owners will want to construct new buildings on the property. The cleanup may need to address soils to a depth of 10 feet in order to protect individuals exposed to soils that are excavated for building foundations. Costs for this action would be moderate.

3) Finally, it is also possible for a CERCLA action to impose institutional controls (deed restrictions) to prevent any

excavation and to limit exposure to the contaminated soils. This would be the least expensive scenario, but would of course also severely limit the options for future use of the property.

Completion of any of these three scenarios could constitute an acceptable action under CERCLA, despite the potentially huge cost difference between the three. Thus, when Commissioner Byron refers to "100% cleanup" versus some lower percentage, she should understand that many different degrees of cleanup can be considered 100% complete under CERCLA.

CERCLA AND PROPERTY TRANSFER

One of the most important requirements in CERCLA impacting closing bases is Section 120(h)(3), which requires that "all remedial action necessary to protect public health and the environment," be taken prior to the deed transfer of property to a party outside the federal government. This provision does not apply to non-deed transfers (leases) or intra-federal government transfers.

In 1992, CERCLA was amended to stipulate that this milestone can be met when EPA concludes that the remedial action is in place, and operating pursuant to an approved remedial design. For example, when a ground water extraction and treatment system is necessary to cleanup up ground water contamination, the property could be transferred after the extraction and treatment system are in place and operating. It is not necessary to wait until cleanup standards are met (which can be decades) prior to the transfer.

It must be noted that very little work at closing bases has reached the Remedial Design/Remedial Action phase, and it will be several years until many bases closed under Rounds I and II can transfer property that has ground water contamination. Typically actions to address soil contamination will be implemented several years after actions cleaning up ground water.

National Priorities List
Federal Facilities Section, Final and Proposed Sites (by State)
February 1995

	St	Site Name	City/County	Date Proposed	Date Final
9	AK	Adak Naval Air Station	Adak	10/92	05/94
	AK	Eielson Air Force Base	Fairbanks N Star Boro	07/89	11/89
	AK	Elmendorf Air Force Base	Greater Anchorage Bor	07/89	08/90
	AK	Fort Richardson (USARMY)	Anchorage	06/93	05/94
	AK	Fort Wainwright	Fairbanks N Star Boro	07/89	08/90
	AK	Standard Steel&Metals Salvage Yard(USDOT	Anchorage	07/89	08/90
		6 Final + 0 Proposed = 6			
	AL	Alabama Army Ammunition Plant	Childersburg	10/84	07/87
	AL	Anniston Army Depot (SE Industrial Area)	Anniston	10/84	03/89
	AL	Redstone Arsenal (USARMY/NASA)	Huntsville	06/93	05/94
		3 Final + 0 Proposed = 3			
	AZ	Luke Air Force Base	Glendale	07/89	08/90
2	AZ	Williams Air Force Base	Chandler	07/89	11/89
	AZ	Yuma Marine Corps Air Station	Yuma	06/88	02/90
		3 Final + 0 Proposed = 3			
	CA	Barstow Marine Corps Logistics Base	Barstow	07/89	11/89
	CA	Camp Pendleton Marine Corps Base	San Diego County	07/89	11/89
2	CA	Castle Air Force Base	Merced	10/84	07/87
	CA	Concord Naval Weapons Station	Concord	02/92	12/94
	CA	Edwards Air Force Base	Kern County	07/89	08/90
3	CA	El Toro Marine Corps Air Station	El Toro	06/88	02/90
2	CA	Fort Ord	Marina	07/89	02/90
1	CA	George Air Force Base	Victorville	07/89	02/90
	CA	Jet Propulsion Laboratory (NASA)	Pasadena	02/92	10/92
	CA	LEHR/Old Campus Landfill (USDOE)	Davis	01/94	05/94
	CA	Lawrence Livermore Lab Site 300 (USDOE)	Livermore	07/89	08/90
	CA	Lawrence Livermore Laboratory (USDOE)	Livermore	10/84	07/87
3	CA	March Air Force Base	Riverside	07/89	11/89
1	CA	Mather Air Force Base	Sacramento	10/84	07/87
	CA	McClellan Air Force Base (GW Contam)	Sacramento	10/84	07/87
2	CA	Moffett Naval Air Station	Sunnyvale	04/85	07/87
1	CA	Norton Air Force Base	San Bernardino	10/84	07/87
	CA	Riverbank Army Ammunition Plant	Riverbank	06/88	02/90
2	CA	Sacramento Army Depot	Sacramento	10/84	07/87
	CA	Sharpe Army Depot	Lathrop	10/84	07/87
	CA	Tracy Defense Depot (USARMY)	Tracy	07/89	08/90
	CA	Travis Air Force Base	Solano County	07/89	11/89
2	CA	Treasure Island Naval Station-Hun Pt An	San Francisco	07/89	11/89
		23 Final + 0 Proposed = 23			
	CO	Air Force Plant PJKS	Waterton	07/89	11/89
	CO	Rocky Flats Plant (USDOE)	Golden	10/84	10/89
	CO	Rocky Mountain Arsenal (USARMY)	Adams County	10/84	07/87
		3 Final + 0 Proposed = 3			
	CT	New London Submarine Base	New London	10/89	08/90
		1 Final + 0 Proposed = 1			
	DE	Dover Air Force Base	Dover	10/84	03/89
		1 Final + 0 Proposed = 1			

National Priorities List
Federal Facilities Section, Final and Proposed Sites (by State)
February 1995

	St	Site Name	City/County	Date Proposed	Date Final
3	FL	Cecil Field Naval Air Station	Jacksonville	07/89	11/89
3	FL	Homestead Air Force Base	Homestead	07/89	08/90
	FL	Jacksonville Naval Air Station	Jacksonville	07/89	11/89
	FL	Pensacola Naval Air Station	Pensacola	07/89	11/89
	FL	Whiting Field Naval Air Station	Milton	01/94	05/94
		5 Final + 0 Proposed = 5			
	GA	Marine Corps Logistics Base	Albany	07/89	11/89
4	GA	Robins Air Force Base(Lf#4/Sludge lagoon	Houston County	10/84	07/87
		2 Final + 0 Proposed = 2			
	GU	Andersen Air Force Base	Yigo	02/92	10/92
		1 Final + 0 Proposed = 1			
	HI	Naval Computer & Telecommunications Area	Oahu	01/94	05/94
	HI	Pearl Harbor Naval Complex	Pearl Harbor	07/91	10/92
	HI	Schofield Barracks (USARMY)	Oahu	07/89	08/90
		3 Final + 0 Proposed = 3			
	IA	Iowa Army Ammunition Plant	Middletown	07/89	08/90
		1 Final + 0 Proposed = 1			
	ID	Idaho National Engineering Lab (USDOE)	Idaho Falls	07/89	11/89
	ID	Mountain Home Air Force Base	Mountain Home	07/89	08/90
		2 Final + 0 Proposed = 2			
	IL	Joliet Army Ammunition Plant (LAP Area)	Joliet	04/85	03/89
	IL	Joliet Army Ammunition Plant (Mfg Area)	Joliet	10/84	07/87
	IL	Sangamo Electric/Crab Orchard NWR (USDOI	Carterville	10/84	07/87
4	IL	Savanna Army Depot Activity	Savanna	10/84	03/89
		4 Final + 0 Proposed = 4			
	KS	Fort Riley	Junction City	07/89	08/90
	KS	Sunflower Army Ammunition Plant	DeSoto	02/95	
		1 Final + 1 Proposed = 2			
	KY	Paducah Gaseous Diffusion Plant (USDOE)	Paducah	05/93	05/94
		1 Final + 0 Proposed = 1			
	LA	Louisiana Army Ammunition Plant	Doyline	10/84	03/89
		1 Final + 0 Proposed = 1			
2	MA	Fort Devens	Fort Devens	07/89	11/89
4	MA	Fort Devens-Sudbury Training Annex	Middlesex County	07/89	02/90
	MA	Hanscom Field/Hanscom Air Force Base	Bedford	05/93	05/94
1	MA	Materials Technology Laboratory (USARMY)	Watertown	06/93	05/94
	MA	Natick Laboratory Army Research,D&E Cntr	Natick	05/93	05/94
	MA	Naval Weapons Industrial Reserve Plant	Bedford	06/93	05/94
	MA	Otis Air National Guard (USAF)	Falmouth	07/89	11/89
4	MA	South Weymouth Naval Air Station	Weymouth	06/93	05/94
		8 Final + 0 Proposed = 8			

National Priorities List
Federal Facilities Section, Final and Proposed Sites (by State)
February 1995

	St	Site Name	City/County	Date Proposed	Date Final
	MD	Aberdeen Proving Ground (Edgewood Area)	Edgewood	04/85	02/90
	MD	Aberdeen Proving Ground(Michaelsville LF	Aberdeen	04/85	10/89
	MD	Beltsville Agricultural Research (USDA)	Beltsville	05/93	05/94
	MD	Indian Head Naval Surface Warfare Center	Indian Head	02/95	
	MD	Patuxent River Naval Air Station	St. Mary's County	01/94	05/94
		4 Final + 1 Proposed = 5			
	ME	Brunswick Naval Air Station	Brunswick	10/84	07/87
2	ME	Loring Air Force Base	Limestone	07/89	02/90
	ME	Portsmouth Naval Shipyard	Kittery	06/93	05/94
		3 Final + 0 Proposed = 3			
2	MI	Wurtsmith Air Force Base	Iosco County	01/94	
		0 Final + 1 Proposed = 1			
	MN	Naval Industrial Reserve Ordnance Plant	Fridley	07/89	11/89
	MN	New Brighton/Arden Hills/TCAAP (USARMY)	New Brighton	12/82	09/83
	MN	Twin Cities Air Force Base(SAR Landfill)	Minneapolis	01/87	07/87
		3 Final + 0 Proposed = 3			
	MO	Lake City Army Ammu. Plant (NW Lagoon)	Independence	10/84	07/87
	MO	Weldon Spring Former Army Ordnance Works	St.Charles County	07/89	02/90
	MO	Weldon Spring Quarry/Plant/Pitts(USDOE)	St. Charles County	10/84	07/87
		3 Final + 0 Proposed = 3			
	NC	Camp Lejeune Military Res. (USNAVY)	Onslow County	06/88	10/89
	NC	Cherry Point Marine Corps Air Station	Havelock	08/94	12/94
		2 Final + 0 Proposed = 2			
	NE	Cornhusker Army Ammunition Plant	Hall County	10/84	07/87
		1 Final + 0 Proposed = 1			
1	NH	Pease Air Force Base	Portsmouth/Newington	07/89	02/90
		1 Final + 0 Proposed = 1			
	NJ	Federal Aviation Admin. Tech. Center	Atlantic County	07/89	08/90
4	NJ	Fort Dix (Landfill Site)	Pemberton Township	10/84	07/87
4	NJ	Naval Air Engineering Center	Lakehurst	09/85	07/87
	NJ	Naval Weapons Station Earle (Site A)	Colts Neck	10/84	08/90
	NJ	Picatinny Arsenal (USARMY)	Rockaway Township	07/89	02/90
	NJ	W.R. Grace/Wayne Interim Storage (USDOE)	Wayne Township	09/83	09/84
		6 Final + 0 Proposed = 6			
	NM	Cal West Metals (USSBA)	Lemitar	06/88	03/89
	NM	Lee Acres Landfill (USDOI)	Farmington	06/88	08/90
		2 Final + 0 Proposed = 2			
	NY	Brookhaven National Laboratory (USDOE)	Upton	07/89	11/89
3	NY	Griffiss Air Force Base	Rome	10/84	07/87
3	NY	Plattsburgh Air Force Base	Plattsburgh	07/89	11/89

National Priorities List
Federal Facilities Section, Final and Proposed Sites (by State)
February 1995

	St	Site Name	City/County	Date Proposed	Date Final
4	NY	Seneca Army Depot	Romulus	07/89	08/90
		4 Final + 0 Proposed = 4			
	OH	Air Force Plant 85	Columbus	01/94	
	OH	Feed Materials Production Center (USDOE)	Fernald	07/89	11/89
	OH	Mound Plant (USDOE)	Miamisburg	07/89	11/89
2	OH	Rickenbacker Air National Guard (USAF)	Lockbourne	01/94	
	OH	Wright-Patterson Air Force Base	Dayton	06/88	10/89
		3 Final + 2 Proposed = 5			
	OK	Tinker Air Force(Soldier Cr/Bldg 300)	Oklahoma City	04/85	07/87
		1 Final + 0 Proposed = 1			
	OR	Fremont Nat. Forest Uranium Mines (USDA)	Lake County	06/93	
1	OR	Umatilla Army Depot (Lagoons)	Hermiston	10/84	07/87
		1 Final + 1 Proposed = 2			
4	PA	Letterkenny Army Depot (PDO Area)	Franklin County	04/85	03/89
4	PA	Letterkenny Army Depot (SE Area)	Chambersburg	10/84	07/87
2/4	PA	Naval Air Development Center(8 Areas)	Warminster Township	06/86	10/89
	PA	Navy Ships Parts Control Center	Mechanicsburg	01/94	05/94
	PA	Tobyhanna Army Depot	Tobyhanna	07/89	08/90
	PA	Willow Grove Naval Air & Air Res. Stn.	Willow Grove	08/94	
		5 Final + 1 Proposed = 6			
	PR	Naval Security Group Activity	Sabana Seca	06/88	10/89
		1 Final + 0 Proposed = 1			
2	RI	Davisville Naval Construction Batt Cent	North Kingston	07/89	11/89
	RI	Newport Naval Education/Training Center	Newport	07/89	11/89
		2 Final + 0 Proposed = 2			
	SC	Parris Island Marine Corps Recruit Depot	Parris Island	08/94	12/94
	SC	Savannah River Site (USDOE)	Aiken	07/89	11/89
		2 Final + 0 Proposed = 2			
	SD	Ellsworth Air Force Base	Rapid City	10/89	08/90
		1 Final + 0 Proposed = 1			
	TN	Arnold Engineering Develop. Ctr. (USAF)	Tullahoma/Manchester	08/94	
4	TN	Memphis Defense Depot (DLA)	Memphis	02/92	10/92
	TN	Milan Army Ammunition Plant	Milan	10/84	07/87
	TN	Oak Ridge Reservation (USDOE)	Oak Ridge	07/89	11/89
		3 Final + 1 Proposed = 4			
	TX	Air Force Plant #4 (General Dynamics)	Fort Worth	10/84	08/90
	TX	Lone Star Army Ammunition Plant	Texarkana	10/84	07/87
	TX	Longhorn Army Ammunition Plant	Karnack	07/89	08/90
	TX	Pantex Plant (USDOE)	Pantex Village	07/91	05/94
		4 Final + 0 Proposed = 4			

National Priorities List
Federal Facilities Section, Final and Proposed Sites (by State)
February 1995

	St	Site Name	City/County	Date Proposed	Date Final
4	UT	Hill Air Force Base	Ogden	10/84	07/87
	UT	Monticello Mill Tailings (USDOE)	Monticello	07/89	11/89
4	UT	Ogden Defense Depot (DLA)	Ogden	10/84	07/87
3	UT	Tooele Army Depot (North Area)	Tooele	10/84	08/90
		4 Final + 0 Proposed = 4			
	VA	Defense General Supply Center (DLA)	Chesterfield County	10/84	07/87
	VA	Fort Eustis (US Army)	Newport News	01/94	12/94
	VA	Langley Air Force Base/NASA Langley Cntr	Hampton	05/93	05/94
	VA	Marine Corps Combat Development Command	Quantico	05/93	05/94
	VA	Naval Surface Warfare - Dahlgren	Dahlgren	02/92	10/92
	VA	Naval Weapons Station - Yorktown	Yorktown	02/92	10/92
		6 Final + 0 Proposed = 6			
	WA	American Lake Gardens/McChord AFB	Tacoma	09/83	09/84
	WA	Bangor Naval Submarine Base	Silverdale	07/89	08/90
	WA	Bangor Ordnance Disposal (USNAVY)	Bremerton	10/84	07/87
	WA	Bonneville Power Admin Ross (USDOE)	Vancouver	07/89	11/89
	WA	Fairchild Air Force Base (4 Waste Areas)	Spokane County	06/88	03/89
	WA	Fort Lewis (Landfill No. 5)	Tacoma	10/84	07/87
	WA	Fort Lewis Logistics Center	Tillicum	07/89	11/89
	WA	Hamilton Island Landfill(USA/COE)	North Bonneville	07/91	10/92
	WA	Hanford 100-Area (USDOE)	Benton County	06/88	10/89
	WA	Hanford 1100-Area (USDOE)	Benton County	06/88	10/89
	WA	Hanford 200-Area (USDOE)	Benton County	06/88	10/89
	WA	Hanford 300-Area (USDOE)	Benton County	06/88	10/89
	WA	Jackson Park Housing Complex (USNAVY)	Kitsap County	06/93	05/94
	WA	McChord Air Force Base (Wash Rack/Treat)	Tacoma	10/84	07/87
	WA	Naval Air Station, Whidbey Is (Seaplane)	Whidbey Island	09/85	02/90
	WA	Naval Air Station, Whidbey Island (Ault)	Whidbey Island	09/85	02/90
BRAC 4	WA	Naval Undersea Warfare Station (4 Areas)	Keyport	06/86	10/89
	WA	Old Navy Dump/Manchester Lab(USEPA/NOAA)	Manchester	01/94	05/94
	WA	Port Hadlock Detachment (USNAVY)	Indian Island	06/93	05/94
	WA	Puget Sound Naval Shipyard Complex	Bremerton	05/93	05/94
		20 Final + 0 Proposed = 20			
	WV	Allegany Ballistics Laboratory (USNAVY)	Mineral	06/93	05/94
	WV	West Virginia Ordnance (USARMY)	Point Pleasant	12/82	09/83
		2 Final + 0 Proposed = 2			
	WY	F.E. Warren Air Force Base	Cheyenne	07/89	02/90
		1 Final + 0 Proposed = 1			
		154 Final + 8 Proposed = 162			

PAGES: (1) 3/29/95

FAX TO: BOB CARR (202)260-5646

FROM: DEIRDRE NURRE

PLEASE REVIEW THE FOLLOWING PARAGRAPH:

→DRAFT←

current Congressional debate over Superfund reform.

[FUNDING FEDERAL FACILITY CLEANUPS: [verify this info with AFBCA reps]

Federal facility cleanups for bases which are not closing are funded by the Defense Environmental Restoration Account (DERA), an account designated by a congressional appropriation. Ongoing environmental compliance activities not related to cleanup are paid with compliance money drawn from base operation and maintenance funds. Once a base is closed or realigned, base cleanup activities are paid with BRAC funds designated by year of BRAC closure. Such BRAC money pays for various closure and realignment expenses, such as moving missions, new construction for new missions, etc. Once a BRAC account for the designated closure year has been spent down, it cannot fund additional activities unless a specific appropriation adds funds to the account. Thus, BRAC activities compete with other closure-related needs for a finite sum in the BRAC account. DERA funds, on the other hand, are "fenced": that is, they are not available for other DoD uses but fund cleanup activities exclusively. DERA funds also differ from BRAC account funds in that DERA is one-year money which is given an annual appropriation.]

BRAC

Is this accurate, Bob - am I saying anything that's not true? I'm trying to complete a memo here & can't get anyone to verify this info. Pls. call - thanks! Deirdre.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

June 9, 1995

SUBJECT: "Speed the Clean-up of Toxic Contamination"

FROM: John Kemmerer, EPA, Region 9

TO: Ben Williams, California Office of Planning & Research

During the June 7 CMECC meeting you requested input on the subject issue paper, which will apparently be used to brief California's legislative affairs office in Washington D.C. I appreciate your willingness to consider my comments. Please call me at 415-744-2241 if you would like to discuss this further.

1. Given that it is currently DoD policy to reflect reuse in cleanup work, there are no existing impediments that prevent a BCT to direct cleanup funds toward high priority reuse sites versus sites with more significant cleanup needs. A prime example of where this has already been done is Fort Ord, where relatively low priority (from a cleanup perspective) motor pool sites are now being addressed (several years ahead of schedule) due to the high priority given to these sites by the local reuse authority.

As I mentioned during the CMECC meeting, DoD's policy would be strengthened if it included a specific requirement that the analysis of cleanup alternatives (in the Feasibility Study report) include an analysis of an alternative that will accommodate reuse. This should be occurring now, but there has been confusion in some cases that cleanup should only have to accommodate a reuse that is consistent with current use. By analyzing an alternative that accommodates reuse, the BCT will have data available to support remedy selection that accommodates reuse if such a remedy is protective and cost-effective.

As currently written, the description of this issue implies that there is larger economic value and reuse potential at parcels with "minor contamination", as compared with "highly contaminated" parcels. As you know, often base property with industrial infrastructure may be most amenable to reuse, and may contain significant contamination. The implication that there is an inverse relationship between the extent of contamination and reuse potential is not generally accurate.

2. Issue #2 looks fine to me.

3. As we discussed at the CMECC meeting, while removing storage

is a good idea that was part of last year's Superfund Reform Bill, I'd suggest you delete the reference to pesticides, and not try to carve an exemption to what is considered a release. EPA's April 19, 1994 policy on the implementation of CERFA already gives flexibility in this area. This policy states, "EPA is concerned with both protecting human health and the environment, and achieving Congress' goal of expeditiously transferring uncontaminated property." The policy allows discretion for EPA to concur with the military that property can be considered uncontaminated even if there has been some limited quantity stored, disposed of, or released, as long as these activities do not pose a threat to human health or the environment.

The policy specifically addresses pesticides, stating that in the absence of evidence of a threat, routine application of pesticides doesn't necessarily disqualify a parcel from being considered uncontaminated. If there is information which indicates extensive application of pesticides, EPA may condition concurrence "on further information on the nature or quantities applied or the results of confirmatory sampling to assure that residual levels do not pose a threat to public health and the environment."

Pursuant to this policy, Region 9 has developed an implementation policy, which has been discussed in detail with the military services and States. We have concurred with the identification of significant areas of property where pesticides have been applied. For example, at MCAS El Toro, the Navy provided information on pesticide use, and took a limited number of samples in areas with heavy application. As a result of this sampling, we found that most of the areas where pesticides were applied were not a problem. However we found one area (currently being leased out as a tree nursery) with residual pesticide levels exceeding soil cleanup standards. As a result of this finding, the Navy chose not to identify this portion of the base as uncontaminated. Region 9 concurred on all 2537 acres identified as uncontaminated by the Navy on this 4770 acre base.

Consideration of pesticides is being done in a reasonable, protective manner. Adding an exemption to the law for pesticides is not warranted, and could lead to property with dangerous levels of contamination being labeled as "uncontaminated."

4. The description of the impacts of NPL listing is inaccurate.

First of all, there is not an additional layer of review and legal requirements as a result of California bases being added to the NPL. At both NPL and non-NPL bases, the State agencies (DTSC and Water Board), and EPA are involved in review of documents, this doesn't change when a base goes on the NPL. In fact, documentation requirements are <u>less</u> burdensome when a California base goes on the NPL, as a result of the California Health and Safety Code requirements for the preparation of Remedial Action Plans (RAPs) for

removal actions at non-NPL sites. The requirement for this preparation of duplicative documentation does not apply if a base is on the NPL. We are currently seeing this impact attempts to accelerate cleanup at non-NPL bases such as Mare Island, where RAPs are required, while similar actions at NPL bases such as Norton AFB are proceeding in a more streamlined manner.

Second, when accurate information is provided on the implications of NPL listing, we have found that there is no "stigma". Much of the misinformation about NPL listing concerns potential liability for cleanup. As we discussed at the CMECC meeting, DoD is required to provide indemnification to future lessees and transferees against liability for the military's cleanup. Indemnification aside, Superfund liability is determined under Section 107 of CERCLA, which makes no distinction between property on or off the NPL. If there were a stigma to property on the NPL hindering reuse, why would California's most significant potential successes for base conversion be at bases that are on the NPL (Fort Ord, Sacramento Army Depot, Norton AFB)? If not being on the NPL is such an advantage, why is the base with the most notorious record for reuse problems due to contamination a non-NPL base (Hamilton)?

Third, while state regulatory agencies are often assisting in important advances toward expediting remediation and reuse, we have seen that progress towards enforceable agreements at California's non-NPL closing bases has been almost non-existent. Only two non-NPL closing bases in California have Federal Facility State Remediation Agreements (FFSRA). Of these, only one currently has a schedule in place. Enforceability of this schedule is questionable, since FFSRA's don't have provisions for penalties if milestones are missed. As you heard during presentations at last week's CMECC meeting, the military services place a higher priority on cleanup funding if there is a legally enforceable requirement that work be performed. Thus, by not having enforceable agreements in place, California's non-NPL bases may be given a lower priority for cleanup funding than those bases on the NPL. Given their concern with meeting enforceable milestones, it is not surprising that senior management within the Department of Defense want to limit the number of bases that are covered by legally enforceable agreements, and therefore argue against NPL listing. However, many military service representatives at the working level have recommended NPL listing for their bases in order to increase their opportunities to gain cleanup funding.

John Kemmerer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

JUN 13 1995

MEMORANDUM

Subject: Proposal of Mare Island Naval Shipyard and Alameda Naval Complex to the National Priorities List

From: Jeffrey Zelikson
Director, Hazardous Waste Management Division

To: Elliott Laws
Assistant Administrator for Solid Waste and Emergency Response

In recent weeks, I have learned of headquarters' reluctance to proceed with future National Priority List (NPL) additions unless the State in which a site is located expressly supports the action. This developing policy was apparently based on proposed legislation requiring State concurrence for future listings. We are very concerned that this emerging policy will effectively serve as State veto authority in the imminent proposal to the NPL of two closing military bases in Region 9, Mare Island Naval Shipyard and Alameda Naval Complex. We believe both bases would benefit from listing.

Preparation of listing packages for Mare Island and the Alameda Complex began long ago, and both sites are ready for proposal to the NPL as part of Rule #19, scheduled to be published in the Federal Register in mid-June. For years Region 9 has made it our policy to closely coordinate all listing actions with our States, and has done so with California in these two instances. While generally we have been successful in reaching agreement with States on listing actions, California has consistently expressed its desire to keep closing military bases off the NPL. By letter dated December 1, 1993 to Carol Browner, the State of California requested no additional closing bases be listed. You responded to this request on July 8, 1994 indicating EPA could not agree to this request. California reiterated its opinion in a 1994 report of the Governor's Reuse Task Force, and most recently at meetings of the Defense Environmental Response Task Force. We therefore see nothing to be gained by again requesting the State's position on this point.

Region 9 continues to believe there are clear advantages to listing these two high environmental priority bases, as outlined in the attached paper. In keeping with your July 8, 1994 letter to California, and considering both President Clinton's veto of

the proposed legislation and the many benefits of listing Mare Island Naval Shipyard and Alameda Naval Complex on the NPL, I request that these two bases be approved for proposal to the NPL as currently scheduled.

If you have any questions or would like to discuss my concerns, please call me at your earliest convenience.

Enclosures

LISTING MARE ISLAND NAVAL SHIPYARD AND ALAMEDA NAVAL AIR STATION ON THE SUPERFUND NATIONAL PRIORITIES LIST IS NECESSARY TO SUCCESSFULLY IMPLEMENT THE PRESIDENT'S FAST TRACK CLEANUP PROGRAM FOR CLOSING MILITARY BASES

BACKGROUND

* LONG TERM EFFORTS HAVE LED TO THE DECISION TO LIST TWO HIGH PRIORITY CLOSING BASES ON THE NPL

With more Federal Facilities eligible for listing on the Superfund National Priorities List (NPL) than any other Region, Region 9 has put significant efforts into selecting which facilities should be listed. Over the past eighteen months, staff and contractor resources in Region 9's site evaluation office have prepared listing packages on the two California federal facilities that are the Region's highest priority for addition to the NPL - Mare Island Naval Shipyard and Alameda Naval Air Station, both of which are closing military bases.

* REGION 9'S DECISION IS CONSISTENT WITH EPA POLICY

California's Secretary of the Environment, James Strock wrote to Administrator Browner on December 1, 1993 requesting that EPA not list any more of California's closing military bases on the NPL. Region 9 worked closely with EPA-HQ in considering the pros and cons of listing, and whether to grant California's request. On June 8, 1994, Assistant Administrator Elliott Laws responded to Mr. Strock stated that EPA could not agree to his request. AA Laws cited EPA's published NPL listing policy and community input as reasons why high priority bases should continue to be added to the NPL.

In a recent letter to Administrator Browner, the governor of Ohio requested that EPA not list three military bases in that state on the NPL. In response, on March 31, 1995, the Administrator stated that EPA would consider deferring listing of one of the three as a pilot project, but that the other two bases would go forward on the NPL. There are many military bases in Region 9 that we would be willing to defer from listing as pilots. However, given the benefits that NPL listing of Mare Island and Alameda would provide, and the efforts that have gone into preparing for the listing, we strongly believe that the proposal to the NPL of these two bases should proceed.

* THERE IS LITTLE OR NO HOPE THAT LISTING CAN GO FORWARD IF GOVERNOR WILSON'S CONCURRENCE IS NEEDED

With these two facilities about to be proposed to the NPL in the next update (late April/early May, 1995), on April 17, 1995 we learned that a new policy is being imposed which will prevent any new listings unless there is concurrence from the governor in the

state in which the facility is located. Governor Wilson has gone on record as being opposed to any new NPL listings of military bases, which is consistent with his stance of not wanting any EPA involvement in California (EPA's implementation of the Clean Air Act has become an especially politicized issue in California).

REGION 9 RATIONALE FOR LISTING

* NPL LISTING ALLOWS EPA TO ENSURE THAT CLEANUP IS PROPERLY PERFORMED AT FEDERAL FACILITIES

A policy of not listing civilian-owned sites on the NPL may not impact EPA's ability to ensure that cleanup work is performed in a thorough and expeditious manner since EPA can issue orders under CERCLA to address hazardous substance releases. However most authority at federal facilities have been provided to the responsible federal agencies under Executive Order. Exceptions are facilities on the NPL, which must enter into agreements with EPA for completion of remedial actions. Federal facilities on the NPL must also gain EPA's concurrence on the selection of remedial actions, with EPA making the final decision if there is a disagreement.

* THERE IS MORE PROGRESS IN CLEANUP AT CLOSING BASES WHICH ARE ON THE NPL

Region 9 is assisting the military with cleanup at 24 closing bases being addressed by the President's "Fast Track Cleanup Program." This is one-third of all of the bases covered by the program, and more than twice the number in any other Region. Of these 24, ten are on the NPL. Thus, we have had an opportunity to compare progress in meeting the objectives of the President's program at NPL bases with non-NPL bases. We are seeing that progress in cleanup and reuse is further along at the NPL bases. There has not been initiation of long-term remedial actions at any of the non-NPL bases, whereas most of the NPL bases have cleanup systems operating to address significant contamination problems.

* REUSE IS FURTHER ALONG AT CLOSING BASES ON THE NPL

In order for these bases to be converted to civilian use, property is transferred or leased by the military. Property cannot be transferred by deed until cleanup actions are operating properly and successfully. The only bases where there has been significant property transfer have been NPL bases (Sacramento Army Depot and Fort Ord). Property can be leased prior to cleanup, however it is critical to have an understanding of the environmental conditions of property. Investigatory work is far enough along to support leases at all of Region 9's NPL bases. Unfortunately there has not been enough progress in investigation at several of the non-NPL bases to support leases.

* ENFORCEABLE AGREEMENTS AT BASES ON THE NPL HAVE LED TO PROGRESS

We attribute much of the progress at NPL bases to the fact that Federal Facility Agreements are in place. These agreements include enforceable milestones, stipulated penalties, and final decision making by EPA to resolve any disputes. In contrast, the majority of the non-NPL closing bases in Region 9 are working without the structure of an agreement. Only two of the Fast Track bases (one is Mare Island) have agreements between the State and the military. Unfortunately, we've found that these agreements do not provide for finality in decision making, nor do they include meaningful enforcement tools, such as stipulated penalties. This is not surprising given that CERCLA's provisions for agreements and final decision by a regulatory agency are linked to NPL listing. The State's only recourse if they are unable to get the military to meet a deadline is to take them to court.

In March, 1995 EPA-HQ asked each Regional office to examine each military base covered by the Fast Track Program and to report on how EPA's involvement in the program has been impacting the cost and timing of cleanup and reuse. While Region 9 reported that EPA's input directly led to significant cost and time savings, we concluded that much more progress has been made at bases on the NPL and that progress is being hindered by the lack of structure for the work at many non-NPL bases.

* STATUS OF WORK AT MARE ISLAND AND ALAMEDA ARGUES FOR LISTING

Region 9 has closely examined the status of ongoing investigation and cleanup work at Mare Island and Alameda, and we has concluded that cleanup and reuse at these bases would benefit from being added to the NPL. Both bases have extensive contamination. Mare Island has been used as a Navy shipyard, with the associated industrial activities since the 1850's. Alameda NAS has operated since 1940 on the former site of an oil refinery.

Mare Island is one of two non-NPL closing bases in Region 9 to have a Federal Facility State Remediation Agreement (FFSRA). We have concluded that this agreement is not a viable substitute for the Federal Facility Agreements (FFA) entered pursuant to CERCLA at NPL bases. The FFSRA does not have provisions for stipulated penalties should deadlines be missed or work of poor quality be performed. It also does not have a vehicle for making decisions if disputes arise between the Navy and the State. Disputes are elevated, but unlike an FFA at an NPL site, where EPA makes the final decision, there is no final resolution.

A schedule was negotiated for completion of investigatory work at Mare Island, however, the State of California requested extensions to the schedule because he was unable to keep up with the reviews of Navy documents. After the Navy elevated this

problem to management within the State, EPA agreed to assist by taking the lead role in the review of several aspects of the investigation and cleanup. For some aspects of the work, EPA is the sole reviewer, yet EPA has no authority to direct changes to the Navy's work.

There is no enforceable agreement in place for Alameda NAS, and we have concluded that progress towards cleanup has suffered as a result of the lack of structure of the work. Although the cleanup team of the Navy, State, and EPA is a model of teamwork, it often appears that the Navy's cleanup contractor is in charge of base priorities. As a result, we're seeing that extensive costs are being incurred in lengthy investigations that are not focused on making cleanup decisions.

Both Mare Island and Alameda have contamination problems that can be expeditiously addressed by CERCLA removal actions. While we are encouraging the Navy to take these actions, they are being delayed by requirements of the California Health and Safety Code which requires preparation of a "Remedial Action Plan" for actions which cost more than $1,000,000. This additional documentation requirement does not add value to the cleanup work, but contributes to delays in cleanup and reuse. State law explicitly exempts NPL sites from this documentation requirement.

* COMMUNITY INVOLVEMENT WOULD BE FACILITATED BY NPL LISTING

There is extensive community interest in cleanup work at both Mare Island and Alameda. Members of the Restoration Advisory Boards at these bases have expressed interest in receiving Technical Assistant Grants (TAGs). These grants are currently only available for bases listed on the NPL.

* NEED FOR COMMUNITY INVOLVEMENT IN DEPARTURE FROM ESTABLISHED EPA POLICY FOR LISTING FEDERAL FACILITIES

Given that EPA's policy for listing federal facilities has been clearly laid out in published policy that has undergone public review, we have questions about how a new policy that would give State Governors the authority to make listing decisions should be communicated to the public. After the State of California asked EPA to refrain from the listing of closing bases, we received input from community groups which supported the continuation of our published listing policy. After we heard of the requirement to gain concurrence from the Governor, we asked our contacts in OSWER for advice on how this new requirement should be communicated to the public. We are still awaiting a response.

* RESPONSE TO OFTEN-HEARD CRITICISM OF NPL LISTING

Several issues have been raised in criticism of NPL listing of closing military bases. Many of these are a result of

misunderstandings about CERCLA or other legal requirements. In some cases, criticism is unsubstantiated, and often made by individuals with unspoken motives for keeping bases off the NPL. A few of the commonly heard criticisms, with our responses follow.

- "If a base is on the NPL, future users could be required to clean up contamination left by the military." First of all CERCLA liability can exist regardless of whether property is on the NPL. However, while these concerns could be valid for property that is privately owned, and then sold to a new owner, this is not a problem for military bases due to provisions of CERCLA and the Defense Appropriations Act of 1993. When property is transferred by the federal government, Section 120(h) of CERCLA requires the transferring agency to provide a covenant that if any remedial action is found to be necessary after the transfer it will be conducted by the federal government. Furthermore, the Defense Appropriations Act of 1993 requires the federal government to indemnify lessees and transferrees from damages, liability, etc. resulting from DoD's contamination.

- "Cleanup work is performed under RCRA instead of CERCLA if the base is not on the NPL, thus making cleanup cheaper and quicker." In Region 9 all cleanup work at non-NPL closing bases is being done under CERCLA, despite the fact that all states are authorized under RCRA. NPL listing of Region 9 bases will not impact which cleanup authority is used. Further, we would disagree that cleanup work under CERCLA cannot be done as quickly or inexpensively as work under RCRA.

- "The stigma of being on the NPL will hinder efforts of developers to get loans for projects on the base." Region 9, along with the State of California and the military services, met with major California lending institutions on September 9, 1994. Discussions were held on the information on environmental conditions that is prepared before property is leased or transferred, and outstanding concerns from the lenders was sought. When the issue of NPL status was raised, lenders stated that NPL status was not a significant factor in determining whether a loan would be made. They noted that they provided loans for property on the NPL as a routine matter.

- "The stigma of being on the NPL will hurt property values in the community." Region 9 has attempted to find some basis for an impact on property values from NPL listing. The only formal studies we've found were both done on housing located <u>on Superfund sites</u> in the Phoenix, AZ area. They were commissioned by a law firm attempting to prove that property values were deflated, but the studies found that there were no impacts.

- "EPA lists the entire base on the NPL, including areas where there is no contamination." Region 9's listing package for Alameda and Mare Island explicitly excludes the parcels on these two bases

that have been identified as uncontaminated by the Navy under CERCLA 120(h)(4).

CONCLUSION

AFTER CAREFUL CONSIDERATION, WE HAVE CONCLUDED THAT NOT ADDING MARE ISLAND AND ALAMEDA TO THE NPL WOULD HINDER EFFORTS TO IMPLEMENT THE PRESIDENT'S FAST TRACK CLEANUP PROGRAM FOR CLOSING BASES. WE RECOMMEND THAT THE NEW POLICY OF REQUIRING GOVERNORS' CONCURRENCE NOT APPLY TO THESE TWO BASES

California Environmental Protection Agency

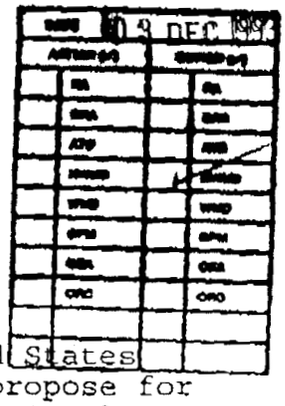
Air Resources Board • Department of Pesticide Regulation • Department of Toxic Substances Control • Integrated Waste Management Board
Office of Environmental Health Hazard Assessment • State Water Resources Control Board • Regional Water Quality Control Boards

Pete Wilson
Governor

James M. Strock
Secretary for Environmental Protection

December 1, 1993

DEC - 6 1993



Ms. Carol Browner
Administrator
401 M Street, SW
United States Environmental Protection Agency
Washington, DC 20460

Dear Ms. Browner:

It has come to my attention that it is the United States Environmental Protection Agency's (US EPA) intent to propose for listing on the National Priorities List (NPL) six additional California closing military bases. I am very concerned that if these sites are listed on the NPL, our mutual goals of expeditiously remediating these sites and facilitating the environmentally safe reuse of base properties will be significantly delayed.

For a closing military base to be placed on the NPL is to be effectively "blacklisted" in the eyes of the public and private sector due to the perception that serious levels of contamination exist throughout the facility. EPA's current policy is to list sites on the NPL "fenceline to fenceline." This creates barriers to the timely reuse of uncontaminated properties since potential liabilities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and perceptions of higher risk make the public and private sector reluctant to purchase or lease parcels listed on the NPL.

Though US EPA staff have indicated that US EPA would consider proposing listing only portions of closing bases, the stigma of NPL designation could effectively negate any benefit associated with the partial listing of a closing base. Parcels of closing bases which might not be formally listed on the NPL will still be viewed by the public as tarnished and, due to their proximity to an NPL site, not attractive locations for develop and reuse. Further, depending upon the degree of site characterization and the status of each base's Environmental Baseline Survey, it may be difficult to determine appropriate site boundaries.

Additionally, the very act of proposing a site for the NPL often slows ongoing remediation work due to concerns that US EPA might reopen issues, question past decisions and impose additional requirements.

California has implemented an effective regulatory program at both NPL and non-NPL sites. The California Environmental Protection Agency (Cal/EPA) and the various branches of the military have been working cooperatively and successfully on the non-listed closing bases. We have enforceable agreements equivalent to Federal Facilities Agreements in place at most non-NPL federal facilities. In order to best coordinate and streamline cleanup activities, I have designated the Department of Toxic Substances Control (DTSC) as the "single voice" for Cal/EPA on base closure issues. We certainly recognize US EPA's interests in potential NPL sites and we feel that a coordinated effort at the closing bases is necessary. However, we do not feel that listing additional closing bases on the NPL should be a prerequisite to the effective remediation and reuse of contaminated parcels.

As you know, part of the President's five part program to revitalize base closure communities includes the directive to "redesign the way the government cleans up military bases". The plan is to "replace the slow, uncoordinated, Washington-driven approach with a common sense approach to protecting the public health and the environment that emphasizes speedy assessment, government teamwork and responsiveness to community needs." Clearly this directive encourages us to reevaluate some of our traditional approaches to problem solving and develop innovative and streamlined procedures to help us do our jobs more effectively and expeditiously.

In conclusion, if US EPA does proceed to list the additional bases on the NPL we may face significant obstacles in achieving the timely remediation and reuse of these closing bases in California. Consequently, I strongly urge you to consider the implications of these proposed actions and not add facilities we are actively working on to the NPL. I am confident that we can work together to meet the President's and California's objectives to ensure that these bases are cleaned up quickly and in a manner which promotes the timely and environmentally safe reuse of uncontaminated and remediated parcels.

Thank you for your attention to these important matters. If you have any questions or comments, please contact me at (916) 445-3846 or Mr. David Wang, operational lead for all Cal/EPA base closure activities, at (916) 255-2009.

Sincerely,

James M. Strock
Secretary for Environmental Protection

cc: The Honorable Pete Wilson
Governor of California
Sacramento, California 95814

Secretary Les Aspin
Department of Defense
The Pentagon
Washington, DC 20301-8000

Ms. Felicia Marcus
Regional Administrator
United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, California 94105-3901

The Honorable Dianne Feinstein
United States Senator
Hart Senate Office Building, Suite 902
Constitution Avenue & 2nd Street, N.E.
Washington, DC 20510-0503

The Honorable Barbara Boxer
United States Senator
112 Hart Senate Office Building
Washington, DC 20510

Congressman Dingell
2328 Rayburn House Office Building
Washington, DC 20515-2216

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 8 1994

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Mr. James M. Strock
Secretary of Environmental Protection
California Environmental Protection Agency
555 Capitol Mall, Suite 235
Sacramento, CA 95814

Dear Mr. Strock:

I am responding to your letter to the U.S. Environmental Protection Agency's (EPA) Administrator, Carol M. Browner, requesting that EPA refrain from including on the National Priorities List (NPL) bases to be closed in California.

The Agency has given a great deal of thought to both your request and the experiences leading to that request. At this point, however, we cannot agree to defer the listing of Federal facility closing bases to California, or any other State. Congress has directed EPA to evaluate for NPL listing purposes both active and inactive Federal facility sites. As you know, EPA has developed a policy pursuant to section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") for placing on the NPL Federal facility sites that meet the eligibility criteria set out in the National Contingency Plan ("NCP"). See 54 Fed. Reg. 10520 (March 13, 1989). EPA sees no reason to treat bases that are about to close any different from other Federal facilities, and thus, the Agency listing policy for Federal facilities properly applies.

Moreover, EPA is concerned about the need for nationally consistent cleanup standards for sites eligible for coverage under Superfund or the Resource Conservation and Recovery Act and the need for community input into the process. This latter concern is heightened by letters the EPA San Francisco regional office has received from several environmental groups supporting the listing of bases to be closed in California.

Although EPA cannot agree to your request, we currently are working with the other Federal agencies to speed up the listing and cleanup processes at all Federal Superfund sites. In that regard, the listing process should run in parallel with ongoing remedial and cleanup efforts. We would welcome any suggestions that you might have to aid us in this effort.

If you have any questions, please contact Larry Reed of the Hazardous Site Evaluation Division, Office of Emergency and Remedial Response. He may be reached at (703) 603-8850.

Sincerely,

Elliott P. Laws
Assistant Administrator

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ 3

To Deirdre Nurre | From Linda Rutsch

Dept./Agency | Phone # 260 1270 (202)

Fax # 703 696 0550 | Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

I also include EPA's April 19, 1994 mei

furthers Congress' goal of expeditiously transferring uncontaminated real property. It makes it possible for more property to be classified as uncontaminated than would a more narrow interpretation of CERCLA section 120(h)(4). At installations closed under BRAC 1 and 2, parcel identification was mandated by April 19, 1994. EPA Regions concurred in the identification of 213 parcels totalling over 37,000 acres at 12 installations listed on the NPL.

One of EPA's early efforts to facilitate property transfers was the issuance of a memorandum on September 22, 1992, "Facilitating Property Transfers at Federal Facilities" related to NPL listing and reuse. This memorandum is important because I believe there is still confusion about the consequences of NPL listing and its implications for property transfer.

The purpose of NPL listing is to define priorities for further evaluation of the extent and impact of releases. An NPL site consists of all areas potentially impacted by hazardous substance releases.

Closing bases which were listed on the NPL were generally listed "fenceline to fenceline" because the Preliminary Assessment/Site Inspection information provided by the military service did not provide adequate documentation for EPA to determine that any particular portion of the installation was not impacted by hazardous substance releases. To ensure that all areas potentially affected by releases were addressed, and to avoid the need for subsequent Federal rulemaking to enlarge the site, the entire installation was included as part of the NPL designation.

DOD has recommended that, as data becomes available, the NPL listing description be amended to "delete" clean parcels. It is generally the policy of EPA not to delete portions of a Superfund site once it is on the NPL. However, EPA stated in the September 1992 memo that transfers of property at closing bases could be facilitated by focusing on the extent or "boundary" of the NPL site. EPA suggested that in future listings the site may not extend to the entire installation if sufficient data is provided by the military service. For existing sites the memorandum suggests that there may be cases in which EPA should "go on the record that [where the parties have reached consensus that a portion of the installation is uncontaminated] that parcel is not, nor has been, part of the NPL site." Because this memorandum was written before CERFA was enacted, it should be noted that the information required to reach such a consensus will not, in all cases, correspond to the information used to identify parcels under CERFA.

EPA further recognizes that some potential buyers may be concerned about purchasing property that is part of an NPL site. We believe that the best way to address buyers' concerns is to correct some common misunderstandings about CERCLA liability and to highlight certain provisions about the transfer of Federally owned property. CERCLA liability is not determined by whether property is part of an NPL site. Liability is defined by CERCLA section 107, which makes no reference to NPL listing. Rather, liability on the basis of property ownership arises if the property is part of a CERCLA "facility" (i.e., an area to which contamination has come to be located). The fact that a parcel lies within the area used to define an NPL site does

not impose liability on the purchaser; liability is imposed by the presence of contamination. Thus, if there is no contamination present, there is no CERCLA liability. Conversely, if there is contamination present, there is CERCLA liability even if the parcel is not considered part of an NPL site. Even if transferred property on an NPL site which was thought to be clean turns out to be contaminated, or if additional response actions are needed after the property is transferred, CERCLA sections 120(h)(3) and (h)(4) provide the guarantee that DOD will conduct any response actions found to be necessary after the date of transfer. In addition, the transferred property remains subject to Section 120(e) of CERCLA and any existing IAG, which would require the military service to conduct an RI/FS and remedial action to address any newly discovered contamination as part of the response at the site.

Recognizing that many portions of closing bases are currently being utilized for residential, commercial or industrial purposes, EPA and DOD are using measures such as interim leases, when appropriate, to give local communities access to property at closing installations until remedial action has been "taken" and the property could then be transferred by deed. In addition, in order to facilitate economic recovery, there may be instances where Interim Remedial Actions can be undertaken prior to the completion of the installation-wide RI/FS. These Interim Remedial Actions will reduce the threat associated with contaminants at the site in a timely manner and will provide an opportunity to deed parcels at an earlier point in time, once the final remedial action has been demonstrated to be operating properly and successfully.

probably = permit mod - $2,000 + 40% of full permit fee (if they're large.

DDOM:
what haz waste codes would have to be added?

Calif: How to modify to add waste codes?

1) 25,000 ? / 100 ? ~~If you look at it~~ Would they require a permit mod or a whole new permit?
A whole new permit? A large permit? → $72,000.

2) Facility would probably already have a fee - they wouldn't need a new one. If it's a
~~Fee~~ Prob'ly only fees for storage.
4,000 - 50,000
Small: up to 1000 tons [small]

1,000 tons - if that's what they are now, they wouldn't pay more.
50,000
They probably wouldn't have
permit mod fee or new permit? That's a technical question.
waste codes - might not require anything.

Manifest fee - $12 fee ~~[redacted]~~ → no maximum.
Cap - they've been maxed out.

Permitting: Watson Chin (916) 322-3501

Are DDOM costs reflected in [illegible]? Special facilities (Clinton cost) + permit mod fee.

- Tina Dorris: DLA BSRTE office (703) 617 7211
  Ask about construction/special facilities.
  What will be needed?
  How much will it cost?
  When reflected in COBRA?

- What do you have now?
  How many lbs yr. storage do you do now (large vs small quant. stored, etc.)?

  New construction at Troy - state & county
  types & permits held → No need for change - will accomodate the entire region even
  It's run by DRMO right now It's underutilized.
  Haz waste storage.

  Haz mat's →

  Requirements modified Troy facility.
  Flammable storage metal -
  Reconfigure it → increase size &
  haz mat operation.

  ~~Ft Hood Troy~~.

Marilyn W.
5/1/95

DLA -

* Richmond - receiving
  laundry control point & diffuse depot.
  ~400 position.
* San Joaquin - ~500 positions -
* Susquehanna: ~400 positions - Harrisburg area.

DDOU - - Sev contam
San Joaquin - Sev. contam

Storage of paint thinners, cleaners, solvents.

HILL/DDO '95 INC.
P.O. Box 1557
Ogden, UT 84401
Phone: (801) 629-2074
Fax: (801) 629-2251

COVER SHEET

TO: Marilyn Wasleski, Interagency Team

FROM: Alicia Richardson for **Mike Pavich**

DATE: 25 April 1995

COMMENTS:

Deirdre -

Could you please check into these Hazardous waste permit costs in CA.? Is this information accurate? This information concerns closing the Ogden Depot + moving the stuff to CA.

Any questions, please let me know.

Thx

- marilyn

5.4.95

To: Marilyn Wasleski

From: Deirdre Nurre

RE: Environmental Issues: Ogden Versus Sharpe/Tracy

During the Commission's site visit to Defense Depot Ogden (DDOU), questions were raised about the Sharpe/Tracy facility's ability to accept hazardous storage from DDOU. I spoke with Walt Larsen of the State of California Cal/EPA, and Eudith Hendricks and Wesley J. Harris of Defense Distribution West to look into the statements submitted by Alicia Richardson for Mike Pavich of Hill/DDO '95 Inc. Both of the DDRW staff have regional responsibilities including both DDRW and DDOU.

1) Richardson states that "it is questionable if the VOC emission aspect of moving DDOU stocks to California has been considered. It may not be possible under current law." While it is possible that VOCs may increase at Sharpe/Tracy due to additional stocks, I see no clear reason law why the "VOC emission aspect of moving current stocks to California" would be a problem under current law. Sharpe and Tracy are in a nonattainment area, but it is unlikely that increased movement of stocks would trigger clean air act conformity requirements. At maximum, approximately 300 persons would be moving to Sharpe/Tracy. This number is unlikely to trigger conformity requirements.

2) Richardson states that the Part B permit currently held by California depots would require modification to add necessary EPA waste codes, and that California requires an initial deposit of $25K plus $100/hr review fees to research and make these changes.

According to DDRW, the hazardous waste facility constructed was built to accommodate hazardous waste storage for Tracy, Castle AFB, and Rough and Ready. The latter two facilities never made use of the capacity because they closed. Because the facility was designed with this large capacity, it has the maximum size Part B permit for hazardous waste storage. DDRW staff state that the facility will not need to apply for additional waste codes unless DLA wants to store pyrotechnics or explosives, the only two items for which Tracy would need a permit modification.

According to Walt Larsen, Director of the Fees Unit for Cal/EPA, a permit modification could cost anywhere from $2000 minimum, up to 40% of the permit fee for a large facility. Tracy is permitted as a large facility.

3) According to Richardson, California requires a hazardous waste facility fee for waste processed. This would cost at least $16,000/year for the amount of material that DDOU mission material generates (250 tons).

DDRW replies that Sharpe and Tracy would pay a higher facility waste fee if they were to acquire additional hazardous waste as a result of DDOU closing. DDRW staff note that hazardous waste facility fees are paid currently by Sharpe, Tracy, and Ogden. They note further that management changes which are currently being planned to reduce hazardous waste storage at Tracy would help to limit the hazardous waste facility fee.

3) Richardson says that California charges manifest fees for each manifest containing hazardous material and a correction fee for each manifest improperly completed. DDOU processes about 100 manifests/year.

California charges $12 per manifest for hazardous material shipment or $6 for recycled hazardous materials shipment. Since DDOU processes 100 manifests per year, it appears that additional manifest fees would not run over $1200 a year. I have no information on the "correction fee", but assuming it is less that the fee for a manifest itself, it must be under $12.

4) Richardson states that "California depots have been assessed $19,000 in environmental fines and penalties. DDOU has received none. Additional violations with high fine potential were documented during FY'94 inspections. Fines assessed were unknown at this time."

DDRW confirmed that notice of violation was made by the State of California against Sharpe in February of 1994. The violation was made for recordkeeping and for holding some items in excess of one year. DDRW attributed the problem to poor tracking by DRMS, and added that new recordkeeping is in place for building 605 where the problem occurred.

DDRW further noted that an internal DLA operational review of hazardous materials operations generated 6 notices of problems in this area at DDOU. The review was conducted in October/November 1994.

In my view, the violations don't seem particularly significant to the closure/realignment decision. To the extent that fines are imposed to induce better compliance with environmental waste law, one could infer that California depots are running a better environmental program than they did before.

The information provided does not allow us to reach a conclusion that Ogden necessarily runs a cleaner program than Sharpe or Tracy. It is unclear whether the California or Utah environmental inspection program are equally vigilant.

5) Richardson states that there are 16 active underground storage tanks at the two California depots. DDOU has removed all their tanks. Underground tanks are a tremendous environmental liability.

While it may have been a good management decision on DDOU's part to have removed their underground tanks, such tanks exist on most military facilities and may have to be cleaned up in the future if they leak. Continuing to operate at DDOU will not prevent the military from having

to investigate and/or clean up underground tanks at Sharpe/Tracy. The military will be financially liable for the Sharpe/Tracy tanks regardless of closing DDOU or keeping it open.

6) Richardson's concluding paragraph implies that DDOU has special facilities, a specially trained and experienced workforce, and a track record of success which DDRW does not. My impression is that although DDRW will need to add storage capacity for hazardous materials (an activity for which no special permits are needed), it seems to have sufficient capacity, permits, and staff experience to accept hazardous waste storage activity. Costs will increase for Tracy's hazardous waste facility fee and for additional manifests, but DLA will no longer be paying a hazardous waste facility fee at DDOU.

The bottom line is that dealing with hazardous material is much more costly and complicated in California than in Utah. It requires special facilities (a $7.3 million dollar cost to provide them at Sharpe and Tracy), a specially trained and experienced workforce, and a track record of success in this area. DDOU already has the special facilities, the trained and experienced workforce, and a successful track record -- DLA chose DDOU as a primary hazardous material site for this very reason.

If there is other information we can provide in this area or any others, please call (801) 629-2074.

Wes J. Harris
209, 982-2099

5 year permit Part B.
No land disposal.

No permit mod needed in Ogden.
If [illegible] time we can accept waste & all containers had not been stored (No pyro's ~~—~~ explosives)
Haz mat done at Tracy and Ogden RD's.

New bldg at Tracy closed
Concept: design - regional haz waste storage site for Castle & Rocky Flats
1 closed. 0

Bldg. was sized to hold up to Phase 2
Capacity is greater

Post RCRA Part B storage.

Storage	max cap		permitted at DTSC
Stge Bldg 605	281 drums	55 gal drums.	may "Large" family 15K gal & stiff classified at waste. 1 year.

at Tracy
2 locations Vhaz
Bldg 240 "cells" - 48K gal / 888 55 gal drums.

Bldg 32 Permitted 128K 55

Waste: Org resins 3% of total size.
above ground tanks
DRMS site dmpd the ball
[illegible] system for Bldg. 605
Kinetics system for 1 year

Hazardous waste

disposal regulations

Hazardous waste is stored

Hazardous materials.

Storage containers.

"Recycling"

waste Reduction at source.

Operation review Group.

Review m

Last update

Regulations of use

1995

BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950508-21

FROM: KING, ANGUS S.	TO: DIXON
TITLE: GOVERNOR	TITLE: CHAIRMAN
ORGANIZATION: STATE OF MAINE	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: PORTSMOUTH NAVAL SHIPYARD	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON		✓	
DIR./COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA	✓		
COMMISSIONER COX	✓		
COMMISSIONER DAVIS	✓		
COMMISSIONER KLING	✓		
COMMISSIONER MONTOYA	✓		
COMMISSIONER ROBLES	✓		
COMMISSIONER STEELE	✓		
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER			
NAVY TEAM LEADER		X	
AIR FORCE TEAM LEADER			
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			
~~DR~~	✓		

TYPE OF ACTION REQUIRED

✓	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
X	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING REPORT "IMPACT ON THE MAINE/NEW HAMPSHIRE SEACOAST ECONOMY-OF CLOSING PORTSMOUTH NAVAL SHIPYARD."

Due Date: 950510	Routing Date: 950508	Date Originated: 950502	Mail Date:

STATE OF MAINE
OFFICE OF THE GOVERNOR
1 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0001

Please refer to this number when responding 950508-2

ANGUS S. KING, JR.
GOVERNOR

May 2, 1995

The Honorable Alan J. Dixon
Chairman
Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear Chairman Dixon:

It has come to my attention that you do not have a copy of the enclosed report assessing the "Impact on the Maine/New Hampshire Seacoast Economy of Closing Portsmouth Naval Shipyard."

This report was prepared last September, in a collaborative effort by the Maine State Planning Office, the New Hampshire Department of Resources and Economic Development and the New Hampshire Office of State Planning to provide an objective assessment of the economic importance of the Portsmouth Naval Shipyard to the two-state region.

Should you have any questions or concerns regarding our analysis, please feel free to contact the Maine State Planning Office at 207-287-3471.

Sincerely,

Angus S. King, Jr.
Governor

ASK/rds

Enclosure

PHONE: (207) 287-3531

FAX: (207) 287-1034

IMPACT ON THE MAINE/NEW HAMPSHIRE SEACOAST ECONOMY OF CLOSING PORTSMOUTH NAVAL SHIPYARD

September 30, 1994

JOHN R. McKERNAN, JR., GOVERNOR
STATE OF MAINE

STEPHEN MERRILL, GOVERNOR
STATE OF NEW HAMPSHIRE

IMPACT ON THE MAINE/NEW HAMPSHIRE SEACOAST ECONOMY OF CLOSING PORTSMOUTH NAVAL SHIPYARD

TABLE OF CONTENTS

INTRODUCTION

During 1994 the Department of the Navy is conducting a review of naval military installations in conjunction with the Defense Base Closure and Realignment Act of 1990. The evaluation prepared by the Navy will provide a basis for recommended base closures and realignments to be considered by the Secretary of Defense and the Base Closure Commission during 1995.

In the interest of insuring a thorough and accurate assessment of Portsmouth Naval Shipyard, the States of New Hampshire and Maine have updated the analysis of the economic contribution of Portsmouth Naval Shipyard to the regional economy that was originally done in 1992. Estimates of economic impacts were developed with the use of the IMPLAN regional economic impact model developed by the U.S. Forest Service.

It is clear from this analysis that the closure of Portsmouth Naval Shipyard would deal a devastating blow to the Maine and New Hampshire economies from which they would not soon recover. Portsmouth Naval Shipyard is a critical component of the Seacoast economy, supporting 10,765 jobs and $595 million in income in the two States. **The loss of the Shipyard would lead to a direct decline of 6% in the employment base of the three-county Seacoast region.**

While an essential element in our nation's defense, the Shipyard also serves as the essential support in a region recovering from a recent economic recession. The closure of Portsmouth Naval Shipyard would not only lead to the immediate loss of 5,900 jobs, but would significantly undermine the slow economic recovery currently taking place in the region. The recent recession cost the region 88,000 jobs from 1988 to 1992, and the closure of Pease Air Force Base and Loring Air Force Base has significantly dampened the recovery.

Finally, serious environmental and infrastructure impacts would accompany the loss of the Shipyard. Closure could raise the cost to the Federal Government for remediation of environmental hazards. These same conditions could significantly hinder meaningful civilian reuse of the facility.

Given the dramatic implications of any decision regarding the future of Portsmouth Naval Shipyard, it behooves the Departments of the Navy and Defense to give full and fair consideration to both economic and environmental impacts in its Base Closure and Realignment deliberations. The analysis presented here seeks to inform those decisions, and highlight to the Departments of Navy and Defense issues of special concern regarding Portsmouth Naval Shipyard.

ECONOMIC IMPACT OF PORTSMOUTH NAVAL SHIPYARD

Portsmouth Naval Shipyard is among the largest employers in Maine and New Hampshire and the single largest employer in the seacoast region (York County, Maine and Rockingham and Stafford Counties in New Hampshire). It provided 5,942 federal civilian jobs and $241 million in direct salaries during 1993. Shipyard purchases of goods and services totaled $47.3 million in the same year, with $6.3 million spent within Maine and New Hampshire. Since the mid-1970's capital improvements at the Shipyard have averaged $8 million per year.[1]

Estimates of direct and indirect employment, income and population levels associated with the closure of the Shipyard were derived through the use of the IMPLAN regional modeling system. Closure impacts were based upon 1991-1993 shipyard employment, payroll, purchases and construction expenditures noted above. The results of the IMPLAN analysis were combined with work force levels at the Shipyard to derive total employment and income losses. For the purposes of this analysis impacts were estimated for the Maine/New Hampshire economic region and the Seacoast regional economy, defined here as York County, Maine and Rockingham and Stafford Counties, New Hampshire.

TABLE 1
ECONOMIC CONTRIBUTION OF PORTSMOUTH NAVAL SHIPYARD: 1993
MAINE/NEW HAMPSHIRE REGION

IMPACTS	EMPLOYEE EARNINGS	PROPERTY INCOME*	TOTAL INCOME	STATE# PRODUCT	JOBS	POPULATION
DIRECT	$240.85	$154.51	$395.36	$395.36	5,942	12,111
TOTAL INDIRECT	$9.89	$7.82	$17.71	$19.93	401	795
PURCHASES	$5.14	$4.55	$9.69	$11.28	201	399
CONSTRUCTION	$4.75	$3.26	$8.02	$8.65	200	396
INDUCED	$97.98	$83.62	$181.59	$211.35	4,422	9.013
TOTAL	**$348.72**	**$245.94**	**$594.66**	**$626.64**	**10,765**	**21,918**

Dollar Figures reported in millions
Source: Maine State Planning Office. Estimates developed with IMPLAN Model.
* Property Income = Dividends, interest, rental income, imputed rental income and proprietors' income.
# State Product = Net value of industry output. Represents contribution to Gross State Product.

[1] Source: Seacoast Shipyard Association.

The closure of Portsmouth Naval Shipyard would clearly land a crippling blow to the Maine and New Hampshire economies. The elimination of 5,942 of the best paying jobs in the seacoast economy and $395 million in related income would be accompanied by the loss of an additional 4,823 jobs and nearly $200 million in annual income. **Totaling 10,765 jobs and $594.7 million in personal income, this loss would contribute to the further contraction of the region's economic base.** In fact, the loss of Portsmouth Naval Shipyard would shatter an already weak economy, **forcing the exodus of about 22,000 of the region's citizens, including some of its most skilled and highest paid workers.** Table 1 summarizes the economic impacts of the closure of Portsmouth Naval Shipyard on the Maine-New Hampshire economy.

The economic impacts of the closure of Portsmouth Naval Shipyard would be even more severe on the Seacoast region of York County, Maine and Rockingham and Stafford Counties, New Hampshire. **Total employment losses in this three-county region associated with a shipyard closure are estimated at 9,991, about 10% of all jobs in the region.** Similarly, **$573.7 million in annual income, or 5.3% of total regional income,** will be lost from the Seacoast economy, as shown in Table 2. This three-county region will also **suffer the withdrawal of nearly 22,400 of its citizens, 4.4% of the region's population,** as a result of the massive employment losses.

TABLE 2
ECONOMIC CONTRIBUTION OF PORTSMOUTH NAVAL SHIPYARD: 1993
SEACOAST REGION (YORK, ROCKINGHAM & STAFFORD COUNTIES)

IMPACTS	EMPLOYEE EARNINGS	PROPERTY INCOME*	TOTAL INCOME	STATE# PRODUCT	JOBS	POPULATION
DIRECT	$221.31	$141.99	$363.31	$363.31	5,549	12,374
TOTAL INDIRECT	$10.93	$9.80	$20.73	$22.12	360	881
PURCHASES	$5.43	$6.04	$11.47	$12.86	180	441
CONSTRUCTION	$5.50	$3.76	$9.26	$9.26	179	441
INDUCED	$102.06	$87.55	$189.61	$220.69	4,083	9,113
TOTAL	**$334.31**	**$239.34**	**$573.65**	**$606.12**	**9,991**	**22,368**

Source: Maine State Planning Office. Estimates developed with IMPLAN Model.
* Property Income = Dividends, interest, rental income, imputed rental income and proprietors' income.
# State Product = Net value of industry output. Represents contribution to Gross State Product.

OTHER ECONOMIC IMPACTS

In addition to the job and income effects estimated above, the closure of Portsmouth Naval Shipyard would burden the region's remaining residents and businesses with **added costs of utilities and public services** in the face of diminished incomes and property values. For example, the shutdown of the Shipyard and loss of associated industrial, commercial and residential electric utility customers would result in **a base revenue loss of between $3 million and $5 million.** This amount would have to be recovered through higher rates to residential and business customers. An even more severe revenue loss would be faced by the local water district which serves the Shipyard.

Similarly, the cost of State and municipal services will have to be born by a smaller base of taxpayers. **Local governments could lose as much as 8% of property tax revenue** from commercial and residential losses associated with a closure of Portsmouth Naval Shipyard. These lost utility and tax revenues will force increases in local rates, weakening the competitive position of area businesses and further reducing the discretionary income of remaining households and businesses, jeopardizing even more jobs in the region.

The Port of Portsmouth is a critical component of the Seacoast economy. Loss of the Shipyard will not only eliminate an important user of the Port, but will hinder efforts to retain and improve Port facilities. Moreover, a shutdown of Portsmouth Naval Shipyard could impact the ability of the Port to continue to obtain Federal assistance for necessary channel improvements. Thus, ongoing operations of this important part of the economic infrastructure, as well as current expansion plans, could be seriously jeopardized by the closure of Portsmouth Naval Shipyard.

Finally, as discussed below, there are a number of potential environmental barriers to the full and timely civilian re-use of Portsmouth Naval Shipyard. The presence of hazardous waste sites and historic buildings could restrict and slow commercial or other civilian activities at the Shipyard. Such delays and restrictions to utilizing the resources at the Shipyard would greatly impede meaningful remediation of harmful economic impacts associated with a closure.

THE ECONOMIC CONTEXT: A WEAK SEACOAST ECONOMY

SEVERE RECESSION\ANEMIC RECOVERY

The economies of Maine and New Hampshire are still reeling from the effects of a protracted regional recession. As Figure 1 illustrates, the two state region suffered an extraordinary employment decline of 8.2% from 1989 through early 1992. **Over 88,000 jobs disappeared during that two and a half year period with major losses occuring in the relatively high-wage manufacturing and construction sectors.** Even more disturbing is the fact that after two and a half years of rebound, the region has only recovered two-thirds (56,000) of the jobs that had been lost, making this one of the slowest recoveries on record.

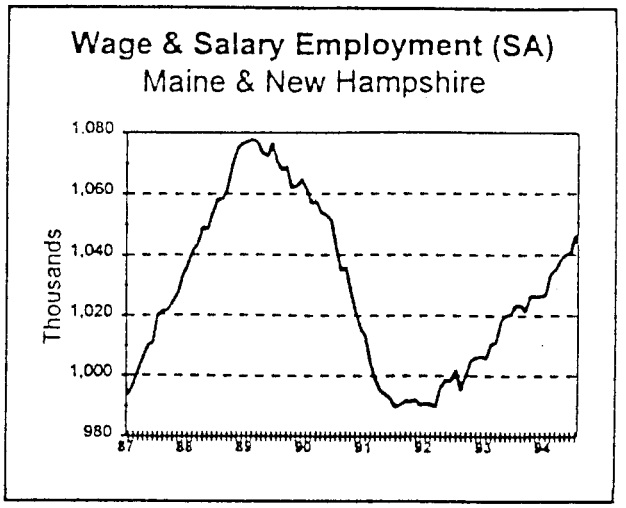


Figure 1

A similar pattern of decline has infected the Seacoast economy. **Wage and salary employment in the three-county region dropped from 109,000 in 1989 to 99,000 by 1991, an 8.3% drop representing a loss of 10,000 jobs.** The most current data for the Portsmouth/Kittery Labor Market Area, displayed in Figure 2, indicate that less than half of the job losses (only 4,300 jobs) have been recouped as of late 1994. Thus, while the downturn in the Seacoast economy was very similar to that experienced in the two state region as a whole, the Seacoast's recovery has been even more anemic than that of the larger region.

While its job level has also been shrinking, the Shipyard has provided an important measure of stability in an otherwise turbulent economy. Even without the closure of Portsmouth Naval Shipyard, the regional economy is not expected to fully recover from the current economic downturn until 1996. Economic activity in the two-state region will continue to show weak performance through much of the 1990's. (see Figure 3) In fact, annual job gains will average 2.3% during most of the 1990's, less than half the pace enjoyed during the last half of the 1980's.

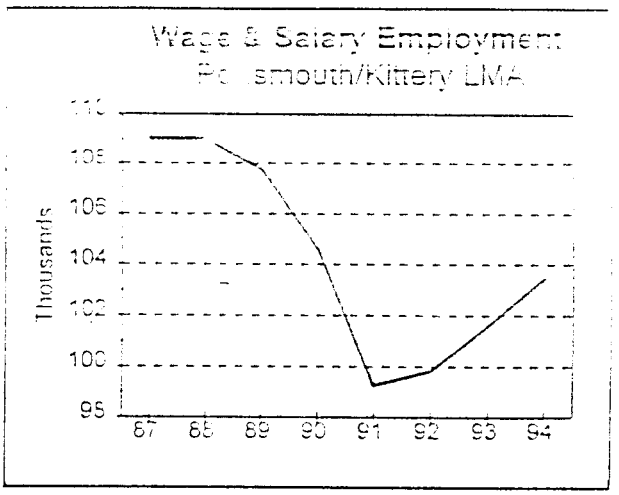


Figure 2

Impact of Recent Defense Cutbacks

In addition to the regional recession, Maine and New Hampshire have suffered from significant defense cutbacks in recent years. Pease Air Force Base, just a few miles from the Shipyard, was closed in April of 1991 resulting in the loss of an estimated 7,600 jobs, $109.3 million in direct payroll and $35.2 million in annual purchases. Loring Air Force Base was closed in September 1994, eliminating 8,016 jobs, $89.6 million in direct payroll and $39.3 million in annual purchases.

Other losses related to defense cutbacks include 3,500 jobs at nearby Bath Iron Works, an estimated 3,800 job losses to smaller defense contractors, subcontractors and military facilities in the region, and a reduction of 2,800 Portsmouth Naval Shipyard jobs since 1989. These 10,100 defense jobs supported at least 6,500 indirect jobs around Maine and New Hampshire. Thus, Maine and New Hampshire have lost over 32,000 jobs to defense cuts since 1989. Table 3 offers an estimate of recent defense-related job losses in Maine and New Hampshire.

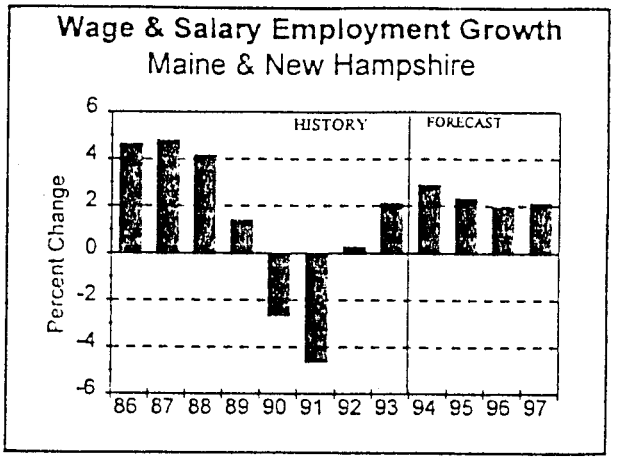


Figure 3

Table 3
ESTIMATED DEFENSE-RELATED JOB LOSSES
IN MAINE AND NEW HAMPSHIRE SINCE 1989

	DIRECT	INDIRECT	TOTAL
PEASE AIR FORCE BASE	4,550	3,045	7,595
LORING AIR FORCE BASE	4,800	3,216	8,016
BATH IRON WORKS	3,500	2,345	5,845
PORTSMOUTH NAVAL SHIPYARD	2,800	1,876	4,676
OTHER DEFENSE ACTIVITIES	3,800	2,301	6,101
TOTAL	19,450	12,785	32,235

ENVIRONMENTAL AND INFRASTRUCTURE ISSUES

There are a number of environmental and infrastructure issues that must be given careful consideration in any assessment of the future of Portsmouth Naval Shipyard. The issues offered here are, by no means, exhaustive. Rather, they represent some of the concerns regarding the Portsmouth Naval Shipyard that should be given special attention by the Navy in its assessment of the Shipyard.

ENVIRONMENTAL CONSIDERATIONS

RCRA, National Priority List and Hazardous Wastes Sites

The Navy, at Portsmouth Naval Shipyard, has undertaken an investigation of potential hazardous waste sites and possible sources of chemical contamination from past disposal activities at the Shipyard. Thirteen areas (Solid Waste Management Units) on the Shipyard have been investigated as required by the Resource Conservation and Recovery Act (RCRA). Additional investigations were conducted this summer to delineate areas of contamination and to better understand hydrogeology of the site. The Portsmouth Naval Shipyard was listed as a National Priorities (CERCLA) site on May 31, 1994.

On-shore and off-shore studies have been completed by the Navy and submitted to State and Federal officials for review and comment. On-shore investigations indicate soils contaminated with heavy metals, fuel oils, PCBs, and solvents. Low levels of volatile organic compounds have been detected in the groundwater.

The Navy has conducted extensive off-shore ecological studies to determine if contaminants are migrating from the Shipyard and adversely affecting biota, sediments, or surface water. Results of these investigations are currently being reviewed by appropriate State and Federal agencies. The Navy has completed an off-shore human health risk assessment based on the ecological estuarine studies and on the ingestions of biota from the estuary surrounding the Shipyard. The analysis of this risk assessment will be presented by the Navy in a public information workshop in the near future.

The fact that there is hazardous waste contamination of both the soil and the groundwater at the Portsmouth Naval Shipyard could hinder timely civilian re-use in the event of closure.

Oil Spill Response

Oil spill response is especially problematic on the Piscataqua River. The Port of Portsmouth supports a substantial amount of commercial activity and currents in the River are among the strongest on the Eastern Seaboard. The U.S. Navy presence at Portsmouth Naval Shipyard has provided an element of the oil spill response team for that region. Closure of the Shipyard will clearly impact the capacity of the civilian authorities to respond to oil spills in these difficult waters.

National Historic Register Sites

Portsmouth Naval Shipyard is home to a number of National Register of Historic Places sites. The Shipyard Historic District contains a remarkable and extensive collection of 19th Century industrial and residential structures of unusually fine design. Unfortunately, the Historic District is in close proximity to industrial facilities and oil storage tanks.

Studies related to the closure of the Philadelphia Navy Yard have cited the lack of an on-site, on-going maintenance program as a potential threat to historic sites there. **Closure of Portsmouth Naval Shipyard would place the historic sites there at similar risk of degradation.** Moreover, the co-location of historic residences and active industrial facilities at the Shipyard **would greatly impede the civilian reuse of the Shipyard.**

Infrastructure Considerations

Port of Portsmouth

The Port of Portsmouth is a critical component of the Seacoast economy. Loss of the Shipyard will not only eliminate an important user of the Port, but will hinder efforts to retain and improve Port facilities. Moreover, a shutdown of Portsmouth Naval Shipyard could impact the ability of the Port to continue to obtain Federal assistance for necessary channel improvements. Thus, ongoing operations of this important part of the economic infrastructure, as well as current expansion plans, could be seriously jeopardized by the closure of Portsmouth Naval Shipyard.

Infrastructure Capacity to Support of Current and Future Navy Mission

While closure of Portsmouth Naval Shipyard would have dramatic affects on the region's civilian economy, the infrastructure in place in the area is fully compatible with the ongoing mission of the Shipyard. In fact, recent improvements will allow the area to easily accommodate an expansion of that mission.

The transportation system supporting the Shipyard has easily accommodated the facility's operation. The recent closure of Pease Air Force Base has increased the capacity of the highway and public transportation systems in the area. Ready access to Interstate Highway 95 and U.S. Route 1, the Spaulding Turnpike in New Hampshire, and the Maine Turnpike all offer ample access to regions north, south and west of the Shipyard.

Other public infrastructure in the region enjoy abundant capacity to service current or increased demand. Waste disposal capacity in the area, for example, has seen a number of recent expansions. The Shipyard, itself has a relatively new industrial waste treatment plant on site. In addition, the Town of Kittery, and other communities in the region have recently upgraded their waste water treatment capacity. Health care facilities have been expanded in the City of Portsmouth, while school district capacity has been increased by the recent closure of Pease Air Force Base.

CONCLUSIONS

This analysis has been prepared to provide decision makers with a thorough and accurate basis from which to evaluate the economic impact of the closure of Portsmouth Naval Shipyard. New Hampshire and Maine have already born more than their share of recent defense cutbacks. Pease Air Force Base in New Hampshire and Loring Air Force Base in Maine have been closed. Maine's Over-the-Horizon Backscatter Radar in Bangor has fallen under the defense budget ax as have 2,800 jobs at Portsmouth Naval Shipyard. Private defense contractors in both States continue to reduce work force levels in the face of procurement reductions, and National Guard force strengths continue to shrink in both States.

Closure of Portsmouth Naval Shipyard would have effects well beyond these economic impacts. Environmental hazards on the site and reductions in the capacity of the region to combat future environmental problems place at risk the quality of life of the Seacoast region in the face of a loss of the Shipyard. Moreover, existing environmental conditions could seriously hinder meaningful civilian re-use of the Shipyard in the event of its closure.

Portsmouth Naval Shipyard has long played a pivotal role in the Maine/New Hampshire economy. Today the Shipyard's role in shoring up the region's economy is more critical than ever. Recent waves of Defense cutbacks and the recent prolonged regional recession have dramatically weakened the Maine and New Hampshire economies. In fact, during 1991 more people left these two states than have entered. The region is better positioned than ever to support the current and future military mission at the Shipyard. However, the loss of Portsmouth Naval Shipyard would rapidly lead to the accelerated deterioration of economic and environmental conditions in Maine and New Hampshire, and especially in the Seacoast region.