

Administration and the Farmers Home Administration.

Also in November, Director Voss reported that he had a telephone conference call with the Medfly Science Advisory Panel and that CDFA would follow the Panel's recommendation to continue trapping and ground spraying for medflies in the Los Angeles area (see supra MAJOR PROJECTS).

At the Board's December meeting in South San Francisco, Director Voss detailed CDFA's budget problems. Having suffered a 22% budget cut in general fund money during 1991–92, CDFA identified an additional \$3.9 million in cuts to be made by the end of June. CDFA was told to make an additional 10% cut for the 1992–93 budget. Thus, the Department will be looking at every program after the first of the year for inefficiencies and to ensure that state, USDA, and county programs are not duplicated.

Board Executive Officer Howard Reed Heritage reviewed SB 2374 (Chapter 1455, Statutes of 1990), which requires the Governor's 1992-93 budget to include an evaluation of the need for all state-funded bodies. Following discussion of the Board's accomplishments, it was moved and seconded that the Board's primary charge is to make recommendations to the Director and the Governor on specific agricultural policy issues. To carry out this charge, the Board identified what it believes are the four most significant policy areas facing agriculture. These include water, pest control, pollution, and land use. The Board established four committees which will study and review specific issues relating to these four policy areas.

FUTURE MEETINGS:

The State Board of Food and Agriculture usually meets on the first Thursday of each month in Sacramento.

On November 21, the Board took its second step in the process of changing the chemical composition of gasoline by adopting so-called "Phase 2 Reformulated Gasoline" specifications. These regulatory changes set new standards for seven gasoline characteristics: Reid Vapor Pressure (RVP), distillation temperatures, and sulfur, benzene, olefin, aromatic hydrocarbon, and oxygen content, applicable on January 1, 1996. The Board's first phase of gasoline reformulation began in September 1990, when it adopted regulations covering RVP and deposit control additives, and phased out leaded gasoline. (See CRLR) Vol. 11, No. 1 (Winter 1991) p. 113 for background information.) These changes were limited to those that would achieve emission reductions without requiring fuel producers to make substantial capital investments. Phase 2 mandates changes in the chemical components of gasoline that will require a \$2-\$5 billion investment by oil companies. If the producers pass the entire cost on to consumers—as is normally the case—the Board expects drivers' average annual fuel costs to rise 12-17%. This amounts to an approximate 2% increase in the annual

The benefits expected in 1996 by the Board are a 15% reduction in emissions of hydrocarbons or volatile organic compounds (VOCs, prime ingredients in the creation of smog), a 6% decrease in oxides of nitrogen (the other primary smog ingredient), a 17% reduction in carbon monoxide (a poisonous compound), an 80% cut in sulfur dioxide (a prime component of acid rain), and an unspecified but substantial contribution to an expected overall 40% decline in benzene (carcinogenic) emissions. These anticipated reductions should result in emission decreases from all sources (stationary and mobile) of 4% for VOCs, 2% for nitrogen oxides, and 10% for carbon monoxide. In addition to reducing the mass of emissions, the Board expects the regulations to result in a decrease in the "reactivity" (smogforming potential) of exhaust gases and of the emissions that result from the evaporation of fuel.

cost of operating a motor vehicle.

Most oil companies believe the price is too high compared to the pollution reduction achieved. They maintain that weaker standards would be cheaper and nearly as beneficial. Gasoline producers also advocate shifting the pollution reduction burden to industrial and other stationary sources. However, ARB justifies its action by pointing to California's severe air quality problems in California. For example, state

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY (CAL-EPA)

AIR RESOURCES BOARD

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Pursuant to Health and Safety Code section 39003 et seq., the Air Resources Board (ARB) is charged with coordinating efforts to attain and maintain ambient air quality standards, to conduct research into the causes of and solutions to air pollution, and to systematically attack the serious problem caused by motor vehicle emissions, which are the major source of air pollution in many areas of the state. ARB is empowered to adopt regulations to implement its enabling legislation; these regulations are codified in Titles 13, 17, and 26 of the California Code of Regulations (CCR).

ARB regulates both vehicular and stationary pollution sources. The California Clean Air Act requires attainment of state ambient air quality standards by the earliest practicable date. ARB is required to adopt the most effective emission controls possible for motor vehicles, fuels, consumer products, and a range of mobile sources.

Primary responsibility for controlling emissions from stationary sources rests with local air pollution control districts. ARB develops rules and regulations to assist the districts and oversees their enforcement activities, while providing technical and financial assistance.

Board members have experience in chemistry, meteorology, physics, law, administration, engineering, and related scientific fields. ARB's staff numbers over 400 and is divided into seven divisions: Administrative Services, Compliance, Monitoring and Laboratory, Mobile Source, Research, Stationary Source, and Technical Support.

MAJOR PROJECTS:

ARB Adopts Phase 2 Reformulated Gasoline Specifications. ARB's ongoing struggle for cleaner air in California consists of two major elements. The first is a low-emission vehicles/clean fuels program. This program requires phasing in new types of vehicles that meet stringent exhaust emission standards and mandates alternative fuels to power them. ARB adopted regulations to accomplish this objective in September 1990. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 113 for background information.) The second element works in the short run to reformulate gasoline. The intention is to have a more immediate impact by reducing emissions of the existing motor vehicle fleet.



ambient air quality standards for ozone were exceeded on 211 days in 1989 in the South Coast Air Basin, 158 days in San Diego, and 148 days in the San Joaquin Valley. Outside supporters of the regulations note that the new gasoline standards are designed only to stem the decline in air quality, not provide blue skies. Reducing emissions per vehicle-mile diminishes air pollution only so long as the number of gasoline-powered vehicles on the road and the time they spend there do not continue their anticipated climb. Recognition of this fact has been integrated into the Board's anti-pollution efforts in the form of its low emission vehicles/clean fuels program, which includes the initial stage of a zero-emission vehicle (ZEV) requirement.

The staff report on the proposed Phase 2 regulations also noted that the situation could be much worse than anyone has believed: New information suggests that VOC concentrations in urban California may be 50-100% greater than previously thought. In December, the National Academy of Sciences confirmed this suspicion. The Academy's report indicated that pollutants in the air have been seriously underestimated nationwide, and that in Los Angeles, for example, hydrocarbon emissions from motor vehicles are two to four times higher than officials had estimated. One implication is that smog control efforts should have focused more on the other primary ingredient, oxides of nitrogen. While many areas of the country do not even monitor nitrogen oxide emissions, ARB has been working for years to control the pollutant. Gasoline reformulation under Phase 2 continues to lower allowable emissions of nitrogen oxides; however, emission reductions are greater for hydrocarbons than nitrogen oxides. The Academy study implies this means some misplacement of resources and less ultimate decline in smog.

In its November 21 action, the Board adopted sections 2258 and 2260–2271 (except as they pertain to wintertime oxygen content of gasoline, a decision that was continued to the Board's December 12 meeting; see infra), and amended sections 2250, 2251.5, and 2252, Title 13 of the CCR. These specifications represent an attempt to finetune the chemical components of gasoline to produce the cleanest-burning, lowest-emitting mixture consistent with reasonable vehicle performance and efficiency. Specifically, a reduction of roughly 50% in benzene content is required. RVP is reduced, which should yield a 20% decline in evaporative emis-

sion of VOCs. The sulfur content of gasoline—an element that results in vehicular sulfur dioxide emissions and, internally, diminishes the effectiveness of the catalytic pollution control device—must be reduced more than 50%. The new requirements set flat limits on gasoline characteristics that apply to producers and importers of gasoline and "caps" that apply to all gasoline throughout the distribution system.

With regard to sulfur, benzene, and aromatic hydrocarbon limits, producers and importers have an additional option of choosing the above-described flat limit, or a more stringent limit that can be met on average through a "designated alternative limit" (DAL) process. A producer choosing the DAL option could transfer from its production a batch of gasoline that exceeds the standards, provided that the producer offsets that batch of gasoline with clean batches and, on an annual basis, the average content of sulfur, benzene, and aromatic hydrocarbons is lower than it would be under the flat limit.

In addition to averaging, the adopted regulations build in flexibility for producers in another way. Gasoline producers will be allowed to develop and demonstrate unique fuel formulas or alternative specifications that will provide equivalent emission reductions. This permits individual producers to take advantage of existing refinery technology and the properties of their current sources of crude oil to minimize the cost of compliance.

These regulatory changes await review and approval by the Office of Administrative Law (OAL).

ARB Adopts Regulations Regarding Wintertime Oxygen Content of Gasoline. On December 12, the Board adopted sections 2258 and 2262.5, Title 13 of the CCR, which require the addition of oxygen to gasoline sold during the winter months starting in November 1992. The cost to consumers is estimated to be a three-cents-per-gallon increase in the price of gasoline; the projected benefit is a 10% reduction in carbon monoxide emissions statewide. According to ARB, carbon monoxidean invisible gas that inhibits the blood's ability to carry oxygen—is as much a problem in the winter as is smog in the summer. The addition of oxygen to gasoline makes the fuel burn more completely, consuming more of the carbon monoxide that would otherwise escape in the exhaust. Some fear that this change may mean more carbon dioxide generation. Carbon dioxide is a greenhouse gas and is thought to contribute greatly to global warming, but it is not a regulated pollutant. ARB staff believes the increase of carbon dioxide will be "negligible."

Also, the addition of oxygen can exacerbate the production of nitrogen oxides, thus contributing to an increase in summer smog. Adding oxygen is required under the federal Clean Air Act for many areas of California, including the Los Angeles, San Diego, and San Francisco regions. However, concern about nitrogen oxides led ARB to set the level of oxygen lower than the minimum set by federal law—2.7% by weight. Under the measure adopted December 12, California gasoline must include at least 1.8% oxygen by weight with a maximum of 2.2%. The state must ask the U.S. Environmental Protection Agency (EPA) for permission to impose the lower oxygen levels.

ARB Adopts Ozone Reactivity Adjustment Factor for Transitional Low-Emission Vehicles. On November 14, ARB approved amendments to section 1960.1, Title 13 of the CCR, adopting a reactivity adjustment factor (RAF) for transitional low-emission vehicles (TLEVs).

In September 1990, ARB adopted low-emission vehicles/clean fuels (LEV/ CF) regulations applicable to passenger cars, light-duty trucks, and medium-duty vehicles. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 113 for background information.) The LEV/CF regulations establish a protocol for adopting RAFs applicable to the four types of vehicle categories: transitional low-emission vehicle (TLEV), low-emission vehicle (LEV), ultra-low-emission vehicle (ULEV), and zero-emission vehicle (ZEV). At the time of adoption, ARB staff committed to present initial proposed RAFs to the Board in the fall of

The RAF concept is necessary to adjust for the fact that different fuels and vehicle types have different ozone-forming potentials for a given mass of emissions. RAFs are determined by calculating the ratio of the ozone-forming potential of the alternative fuel to the ozone-forming potential of average gasoline.

The initial staff proposal would have established TLEV RAFs equal to 0.36 for a TLEV fueled by 85% methane (termed M-85, where 15% of the fuel is ordinary gasoline), 0.18 for one fueled by compressed natural gas (CNG), and 0.50 for a TLEV fueled by liquefied petroleum gas (LPG). However, a modification adopted by the Board revised upward the M-85 RAF to 0.41 to account for modeling bias and updated scientific information. Thus, the adopted



M-85 RAF means that for an equal mass of emissions, M-85 contains only 41% of the smog-producing potential of gasoline. The proposed RAFs for CNG and LPG were withdrawn on staff's recommendation due to uncertainties in the testing protocol and potential biases in the reactivity scale.

This regulatory change awaits review and approval by OAL.

Perchloroethylene Identified as a Toxic Air Contaminant. At its October 10 meeting, ARB held a public hearing and adopted a proposed amendment to section 93000, Titles 17 and 26 of the CCR, which identifies perchloroethylene as a toxic air contaminant (TAC) without a specified threshold exposure level. (See CRLR Vol. 11, No. 4 (Fall 1991) p. 154 for background information.) At this writing, ARB has not yet submitted this amendment to OAL for review.

At the hearing, ARB staff summarized the sources, emissions, and atmospheric concentrations of perchloroethylene and described the resulting potential harm to public health. Staff also discussed several issues that were raised during the perchloroethylene identification phase, including the separation of risk assessment and risk management, public participation in the identification process, and the immediate impacts of identification. The Office of Environmental Health Hazard Assessment (OEHHA) described the health effects evaluation and the basis for its risk estimate. Dr. John Froines, speaking for the Scientific Review Panel on Toxic Air Contaminants (SRP), agreed with the recommendation that perchloroethylene be identified as a TAC and that, based on available scientific evidence, an exposure level below which carcinogenic effects are not expected to occur cannot be identified.

In identifying perchloroethylene as a TAC, ARB accepted the range of cancer risk values recommended by OEHHA and the SRP. However, the Board directed OEHHA staff to conduct a public workshop within four months, preferably with the participation of at least one SRP member, to consider the scientific evidence and to ascertain whether any additional evidence of the risk values for perchloroethylene is available. The Board also recognized that its action may affect permitting and notification decisions of the local air pollution control districts in their use of the health risk information. The Board therefore directed staff to work with OEHHA, the SRP, local regional air districts, industry, and the public to develop recommendations and

tools to facilitate improvements in the use of risk values in risk management decisionmaking. Staff is expected to report the outcome of this effort within six months.

This regulatory change awaits review and approval by OAL.

ARB Tightens Regulations Regarding the State 24-Hour Ambient Air Quality Standard for Sulfur Dioxide. At its October 11 meeting, ARB adopted amendments to sections 70100(k) and 70200, and repealed section 70201, Title 17 of the CCR. These actions revise the 24-hour ambient air quality standard for sulfur dioxide which deals with long-term health effects. (See CRLR Vol. 11, No. 4 (Fall 1991) p. 155 for background information.)

Prior to amendment, violation of the 24-hour sulfur dioxide standard required not only that the 24-hour average sulfur dioxide concentration equal or exceed 0.05 parts per million (ppm) but also, simultaneously, that either the total suspended particulate matter standard of 100 micrograms per cubic meter or the oxidant standard of 0.10 ppm (measured as ozone) be exceeded. ARB staff recommended that the Board amend the standard to lower the numerical value of the sulfur dioxide standard from 0.05 ppm to 0.04 ppm, change the basis for determining violations from "equal or exceed" to "not to be exceeded," and remove the requirement for concurrent exceedance of either the total suspended particulate matter standard or the ozone standard.

The staff recommendations were based on the findings and recommendations of OEHHA. OEHHA's review concluded that long-term exposure (24 hours or longer) to sulfur dioxide is associated with adverse respiratory health effects, including an increased incidence of respiratory symptoms and disease, decrements in respiratory function, and an increased risk of mortality. In addition, OEHHA found that exposures of 0.06 ppm and above represent an "adverse effects level," resulting in adverse health effects. Sulfur dioxide exposures of 0.04 ppm represent a threshold below which no adverse effects are expected.

At this writing, ARB has not yet submitted these amendments to OAL for approval.

Control of Emissions from Marine Vessels. Meteorological data have shown that pollutants from marine vessels off California's coast can substantially reduce air quality in the coastal air basins. A recently developed inventory shows that approximately 22,500 marine vessels either visit or occupy the California

coastal waters (CCWs) (that is, those waters up to 100 miles offshore where emissions affect onshore air quality) on a regular basis. The emissions from these marine vessels operating in CCWs represent approximately 10% of the oxides of nitrogen (NOx) and 37% of the oxides of sulfur (SOx) pollutants statewide, including both mobile and stationary sources. Marine vessels are therefore a significant source of these pollutants and their control will contribute to the attainment of state air quality standards.

Health and Safety Code sections 43013(b) and 43018, as amended in 1988, require ARB to consider the adoption of emission control regulations for marine vessels to achieve the maximum degree of emission reduction possible from this source by the earliest practicable date. Specifically, ARB was required to hold a workshop before January 31, 1991 and a public hearing before November 15, 1991 to consider the adoption of regulations governing emissions from marine vessels to the extent permitted by federal law. Federal law permits state regulation of the emissions from marine vessels so long as the state does not impose design or construction specifications on the vessels.

ARB held a workshop to discuss the control of emissions from marine engines in November 1990. On October 11, 1991, the Board held a public meeting at which staff presented a plan for developing regulations to control marine vessel exhaust emissions. The plan identified those control measures staff considers feasible and ready for regulatory development.

Staff considered three regulatory options to control emissions from marine vessels: engine performance emission standards, district permitting requirements, and a market-based control (MBC) strategy. The first option is a traditional approach which specifies exhaust emission standards for new and in-use marine vessel engines. This allows marine vessel engine builders or operators to select a control technology which would enable them to meet the emission limits. Benefits for new engines would not be realized for at least twenty years, since marine engines are not replaced frequently. However, a certification process similar to that used for motor vehicles could set allowable emission rates for oxides of nitrogen and sulfur beginning January 1, 1995. Emission requirements could be met by engine modifications (e.g., injection timing retard) or operational changes (e.g., use of a low-sulfur fuel such as that mandated for motor ve-



hicles beginning 1993). The second approach would involve working with coastal air pollution control districts to require that stationary pollution sources include in their permit any marine vessel emissions associated with loading or unloading at such facilities and any pollution emitted while in the local district's CCWs.

The MBC strategy combines an emissions averaging program (allowing the pollution from a number of sources to vary, so long as the overall emissions from the area do not exceed a specified amount) with marketable pollution permits. In theory, marketable emission permits allow polluters to reduce emissions in the most economic ways. Staff, however, recommended against further development of the MBC strategy approach. Enforcement of marine vessel MBC regulations may be difficult because of the many marine vessels, companies, and different types of commercial marine operations.

The Board approved the plan to control marine vessel exhaust emissions and directed staff to pursue development of performance standards for marine vessels. Staff will prepare the appropriate regulatory language and present it to the Board for consideration next year.

Revisions to the Designation of Areas in California as Attainment, Nonattainment, or Unclassified for State Ambient Air Quality Standards. At its November 14 meeting, ARB approved revisions to the area designation regulations contained in sections 60200-60209, Title 17 of the CCR. The proposed revisions to the designation regulations are necessary for specific geographical areas in light of additional air quality data collected in 1990 and presented in the Board's annual review of area designations. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 115; Vol. 10, No. 4 (Fall 1990) p. 139; and Vol. 9, No. 4 (Fall 1989) p. 108 for extensive background information on this issue.) The revisions will affect only selected pollutants, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10, sulfates, lead, hydrogen sulfide, and visibility reducing particles. At this writing, ARB has not yet submitted these regulatory changes to OAL.

Consumer Products Regulations— Phase II. At its January 9-10 meeting, ARB was scheduled to conduct a public hearing to consider regulatory amendments to reduce volatile organic compound (VOC) emissions from consumer products (the "consumer products regulations"). This regulatory action would amend sections 94503.5, 94506, 94507-94513, and 94515, Title 17 of the CCR.

Existing law requires the Board to adopt regulations to achieve the maximum feasible reduction in reactive organic compounds emitted by consumer products, if the Board determines that adequate data exists for it to adopt the regulations, and if the regulations are technologically and commercially feasible and necessary to carry out the Board's responsibilities under Division 26 of the Health and Safety Code. To comply with existing law, ARB staff has proposed amendments to the consumer products regulations approved by the Board in October 1990, sections 94507-94517, Title 17 of the CCR (see CRLR Vol. 11, No. 1 (Winter 1991) p. 113 for background information). Staff has also proposed amendments to the regulations for reducing VOC emissions from antiperspirants and deodorants, sections 94500-94506.6, Title 17 of the CCR, which were approved by the Board in November 1989. (See CRLR Vol. 10, No. 1 (Winter 1990) p. 124 for background information.) The amendments to the antiperspirant/deodorant regulations are necessary to achieve consistency with the proposed amendments to the consumer products regulations. These modifications include changes to the test methods and innovative products provisions of the antiperspirant/deodorant regulations.

ARB's existing consumer products regulations set forth VOC standards, with specified effective dates, for sixteen categories of consumer products. The proposed amendments would add new regulatory standards and effective dates for an additional twelve categories of consumer products: aerosol cooking sprays, automotive brake cleaners, carburetor-choke cleaners, aerosol disinfectants, charcoal lighter material, dusting aids, fabric protectants, hand dishwashing detergents, household adhesives, insecticides, laundry starch products, and personal fragrance products. Certain of these categories are further divided into subcategories for which separate VOC content limits are proposed. The amendments also specify certification procedures for charcoal

lighter material.

Implementation of the proposed regulatory action would reduce VOC emissions in California by about ten tons per day by 1999. Even so, the Board's proposals have prompted criticism, particularly the recommendation that the 80% ethanol content in spray disinfectants be reduced to 60% and then 30%. Critics, fearing an adverse effect on public health, cite the effectiveness of full-strength Lysol-type sprays in killing the hepatitis A virus,

which infects 6,000-7,000 Californians per year, and the rotavirus, which kills more than one hundred people per year. Both viruses resist other forms of disinfectant. These products have already been reviewed and registered by the U.S. Environmental Protection Agency.

Update on Other ARB Regulatory Changes. The following is a status update on regulatory changes approved by ARB and discussed in detail in previous

issues of the Reporter:

-After the Board's September 1991 hearing on the progress demonstrated by the automobile industry toward meeting ARB's requirement that 1994 and later-model vehicles be equipped with advanced, computerized on-board diagnostic systems, the Board agreed to minor amendments to sections 1968.1 and 1977, Title 13 of the CCR. At this writing, these regulations await review and approval by OAL. (See CRLR Vol. 11, No. 4 (Fall 1991) p. 154 for background information.)

-ARB's August 1991 amendment to section 93000, Titles 17 and 26 of the CCR, identifying nickel as a toxic air contaminant, has not been submitted to OAL at this writing. (See CRLR Vol. 11, No. 4 (Fall 1991) p. 154 for back-

ground information.)

-The Board's August 1991 amendments to sections 80130, 80150, 80250, 80260, and 80290, Title 17 of the CCR, which modify existing reporting requirements under ARB's Agricultural Burning Guidelines, have not been submitted to OAL for review at this writing. (See CRLR Vol. 11, No. 4 (Fall 1991) p. 154 for background information.)

-The Board's June 1991 amendments to sections 90700-90705 and 93334, Titles 17 and 26 of the CCR, which require local air pollution control districts to adopt rules which assess sufficient fees to cover state agency and district costs to implement the Air Toxics "Hot Spots" Identification and Assessment Act, were submitted to OAL for approval in December. At this writing, OAL has yet to issue a decision. (See CRLR Vol. 11, No. 4 (Fall 1991) pp. 153–54 for background information.)

-ARB's May 1991 adoption of new sections 60075.1-.47, Title 17 of the CCR, which sets forth procedures for the conduct of ARB's administrative hearings for owners of vehicles cited under the Board's Heavy-Duty Vehicle Roadside Smoke and Tampering Inspection Program, was approved by OAL on November 27. (See CRLR Vol. 11, No. 3 (Summer 1991) p. 152 for background information.)

-The Board's February 1991 amendments to sections 94131, 94132, and



94142, Title 17 of the CCR, which expand existing ARB test methods for measuring air emissions from stationary sources to include gaseous fluoride. 1,3-butadiene, and acetaldehyde, were submitted to OAL on December 20. At this writing, OAL has not yet ruled on them. (See CRLR Vol. 11, No. 2 (Spring 1991) pp. 138-39 for background information.)

The Board's December 1990 amendments to section 2256, Title 13 of the CCR, which modify the procedures for certifying alternative diesel fuel formulations, were approved by OAL on November 25. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 115 for back-

ground information.)

-On November 25, OAL rejected ARB's December 1990 adoption of new sections 2400-2407, Title 13 of the CCR. The new regulations set forth emission standards for gasoline-powered lawnmowers, leaf blowers, and other home and garden tools which may require substantial modifications in utility engines, possibly including catalytic converters, to reduce emissions by 46% by 1994 and by 55% by 1995. When approved, the regulations will establish a certification program for utility and lawn and garden engines (small engines), effective January 1, 1994. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 115 for background information.) OAL found that the rulemaking package failed to comply with the clarity and consistency standards of Government Code section 11349.1, and that ARB failed to summarize and respond to all public comments and failed to satisfy other technical requirements of the Administrative Procedure Act. The Board has 120 days to correct these deficiencies and resubmit the rules to OAL.

-In April 1991, ARB staff released a modified version of the Board's test procedures to detect excessive smoke emissions from heavy-duty diesel-powered vehicles and inspection procedures to detect tampered or defective emission control systems components on gasoline- and diesel-powered vehicles. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 116 for background information.) These modifications were approved by OAL on October 21. The new test procedures, which were adopted by ARB in November 1990, will be codified at sections 2180-2187, Title 13 of the CCR.

-ARB's August 1990 amendments to section 1976, Title 13 of the CCR, which specify standards for running losses and extend the durability requirements for evaporative emission control systems to be the same as those for exhaust hydrocarbon systems, were revised and adopted by ARB in March 1991. Initially disapproved by OAL on July 22, they were resubmitted to and approved by OAL on December 17. (See CRLR Vol. 10, No. 4 (Fall 1990) p. 141 for background information.

LEGISLATION:

SB 46 (Torres) would revise the definition of toxic air contaminant to delete an exclusion for pesticides. This twoyear bill is pending in the Senate Ap-

propriations Committee.

SB 431 (Hart) would enact the Demand-based Reduction in Vehicle Emissions (Plus Reductions in Carbon Dioxide) (DRIVE) Program and apply sales tax credits and surcharges on the sale or lease of new vehicles on the basis of the level of specified pollutants emitted. This two-year bill is pending in the Senate Committee on Revenue and

AB 598 (Elder) would require ARB to prepare a list of models of motor vehicles that are significant sources of air pollution, and require the Department of Motor Vehicles (DMV) to develop and implement a program to acquire and scrap the designated vehicles. This two-year bill is pending in the Senate Transportation Committee.

AB 1054 (Sher), which would permit local air pollution districts to adopt emission control regulations relating to consumer products after January 1, 1992, rather than January 1, 1994, is pending in the Senate inactive file.

AB 1419 (Lempert) would prohibit the import, delivery, purchase, receipt, or other acquisition for sale, rental, or lease of a used motor vehicle, unless the model of the vehicle has been certified by ARB as a new motor vehicle. This two-year bill is pending in the Assembly Transportation Committee.

SB 295 (Calderon) would limit charges for automobile smog check compliance and add an additional \$1 to certificate of compliance fees that would be used to fund a program to encourage individuals to report vehicles emitting unusual amounts of pollutants. This twoyear bill is pending in the Senate Transportation Committee.

AB 187 (Tanner) would classify substances listed in recently-enacted amendments to the federal Clean Air Act as toxic air contaminants. This two-year bill is pending in the Assembly Committee on Environmental Safety and Toxic Materials.

AB 280 (Moore) would limit the existing \$300 fine imposed on owners of heavy-duty motor vehicles determined to have excessive smoke emissions or other emissions-related defects only to

those owners who fail to take corrective action, and imposes a \$25 civil penalty in other cases. This two-year bill is pending in the Senate Transportation Committee.

SB 1211 (Committee on Energy and Public Utilities) would require ARB to adopt regulations requiring clean fuel producers, suppliers, distributors, and retailers to supply ARB with cost and price information, which it would then report to the legislature. This two-year bill is pending in the Assembly Transportation Committee.

SB 1213 (Killea) would authorize air pollution control districts and air quality management districts designated as nonattainment areas for state ambient air quality standards for ozone or carbon monoxide by ARB to adopt regulations to require operators of public and commercial light- and medium-duty fleet vehicles, except as specified, when adding or replacing vehicles or when purchasing vehicles to form a new motor vehicle fleet, to purchase low-emission motor vehicles and to require, to the maximum extent feasible, that those vehicles be operated on a cleaner burning alternative fuel. This two-year bill is pending in the Senate Committee on Governmental Organization.

AB 212 (Tanner), as amended March 14, would make various findings and declarations relating to the need to develop a plan for state action to determine the risks posed by exposure to indoor air pollution, and require ARB and the Department of Health Services to submit a specified report to the Governor and the legislature by January 1, 1993. This two-year bill is pending in the Assembly Ways and Means Committee, and is up for reconsideration on January 21.

The following bills died in committee: AB 505 (Sher), which would have prohibited any person from causing the engine of a heavy-duty motor vehicle to idle for more than ten consecutive minutes on the property of a facility for loading or unloading goods from those vehicles; SB 1160 (Leonard), which would have required ARB to establish minimum standards for reformulated gasoline; and AB 405 (Eaves), which would have authorized air pollution control districts to establish systems using emission reductions to offset future increases.

LITIGATION:

On August 10, 1991, the U.S. District Court for the Northern District of California ruled in Citizens For a Better Environment, et al. v. Wilson, No. C89-2044-TEH, and Sierra Club v.



Metropolitan Transportation Commission, et al., No. C89-2064-TEH, that while it failed to meet air quality standards for the San Francisco Bay Area as ordered, the Metropolitan Transportation Commission (MTC) could not be held in contempt of court. However, the court ordered MTC to demonstrate within 120 days the feasibility or infeasibility of additional transportation control measures (TCMs) for reducing emissions of carbon monoxide. (See CRLR Vol. 10, No. 4 (Fall 1990) pp. 144-45 and Vol. 10, Nos. 2 & 3 (Spring/Summer 1990) p. 167 for extensive background information on this case.)

Under the 1982 Bay Area Air Quality Plan, MTC was required to implement a contingency plan if the San Francisco Bay Area had not made "reasonable further progress" toward the fulfillment of the National Ambient Air Quality Standards for carbon monoxide and ozone. In September 1989, the court ruled that the Bay Area had not made reasonable further progress in meeting ozone and carbon monoxide standards and that MTC had failed to implement a contingency plan. (Citizens for a Better Environment v. Deukmejian, 731 F. Supp. 1448 (N.D. Cal. 1990.) MTC was ordered to implement the contingency plan, and thereafter adopted sixteen additional transportation control measures. The plaintiff environmental groups contended that these additional measures did not sufficiently reduce the carbon monoxide and ozone emissions to bring the Bay Area in line with the 1982 Plan, and moved for a finding of contempt or for a summary judgment that MTC was in continuing violation of the contingency plan. MTC filed a cross-motion for partial summary judgment.

The court denied MTC's motion and granted plaintiffs' motions in part and denied in part. The court rejected MTC's argument that the 1990 amendments to the Clean Air Act relieved the Bay Area of compliance with the 1982 emission standards. The commitment to reasonable further progress contained in the 1982 plan would remain in force until replaced by a new EPA-approved plan, despite the fact that the 1987 deadline for compliance had long since passed. The court strongly rejected MTC's notion that a vacuum bereft of regulatory standards appeared after 1987. However, the court found that its 1989 order was insufficiently specific and definite to justify a civil contempt finding. Nor were available data regarding ozone levels and their relationship to TCMs sufficiently clear to justify a finding of noncompliance. But the record did support a finding that MTC had failed to comply with carbon monoxide reduction standards in the transportation sector under the 1982 plan. The court directed MTC to demonstrate whether additional TCMs would be effective in meeting standards under the 1982 plan.

RECENT MEETINGS:

On August 27, the South Coast Air Quality Management District announced that Kingsford Products has developed low-polluting versions of its lighter fluid and fluid-soaked briquettes. The products meet new standards approved by the District in October 1990. (See CRLR Vol. 11, No. 1 (Winter 1991) p. 118 for background information.) Shipment of the new lighter fluid to southern California stores began in September.

FUTURE MEETINGS:

April 9 in Sacramento. April 30 in San Francisco. May 14 in Sacramento. May 28 in Sacramento.

CALIFORNIA INTEGRATED WASTE MANAGEMENT AND RECYCLING BOARD

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The California Integrated Waste Management and Recycling Board (CIWMB) was created by AB 939 (Sher) (Chapter 1095, Statutes of 1989), the California Integrated Waste Management Act of 1989. The Act is codified in Public Resources Code (PRC) section 40000 et seq. AB 939 repealed SB 5, thus abolishing CIWMB's predecessor, the California Waste Management Board (CWMB). (See CRLR Vol. 9, No. 4 (Fall 1989) pp. 110-11 for extensive background information.)

CIWMB reviews and issues permits for landfill disposal sites and oversees the operation of all existing landfill disposal sites. The Board is authorized to require counties and cities to prepare Countywide Integrated Waste Management Plans (CoIWMPs), upon which the Board will review, permit, inspect, and regulate solid waste handling and disposal facilities. A CoIWMP submitted by a local government must outline the means by which its locality will meet AB 939's requirements of a 25% waste stream reduction by 1995 and a 50% waste stream reduction by 2000. Under AB 939, the primary components of waste stream reduction are recycling, source reduction, and composting.

A CoIWMP is comprised of several elements. Each city initially produces a source reduction and recycling (SRR) element, which describes the constituent materials which compose solid waste within the area affected by the element, and identifies the methods the city will use to divert a sufficient amount of solid waste through recycling, source reduction, and composting to comply with the requirements of AB 939. Each city must also produce a household hazardous waste (HHW) element which identifies a program for the safe collection, recycling, treatment, and disposal of hazardous wastes which are generated by households in the city and should be separated from the solid waste stream. After receiving each city's contribution, the county produces an overall CoIWMP, which includes all of the individual city plans' elements plus a county-prepared plan for unincorporated areas of the county, as well as a countywide siting element which provides a description of the areas to be used for development of adequate transformation or disposal capacity concurrent and consistent with the development and implementation of the county and city SRR elements and the applicable city or county general plan.

The statutory duties of CIWMB also include conducting studies regarding new or improved methods of solid waste management, implementing public awareness programs, and rendering technical assistance to state and local agencies in planning and operating solid waste programs. Additionally, CIWMB staff is responsible for inspecting solid waste facilities such as landfills and transfer stations, and reporting its findings to the Board. The Board is authorized to adopt implementing regulations, which are codified in Division 7, Title 14 of the California Code of Regula-

tions (CCR).

The new CIWMB is composed of six full-time salaried members: one member who has private sector experience in the solid waste industry (appointed by the Governor); one member who has served as an elected or appointed official of a nonprofit environmental protection organization whose principal purpose is to promote recycling and the protection of air and water quality (appointed by the Governor); two public members appointed by the Governor; one public member appointed by the Senate Rules Committee; and one public member appointed by the Speaker of the Assembly.

Issues before the Board are delegated to any of six committees; each committee includes two Board members and is