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Chapter 21 E a Case for Regulatory Overhaul

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CHAPTER 21 E
A CASE FOR REGULATORY OVERHAUL
COMMONWEALTH OF MASSACHUSETTS
WINTER, 1991

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The Center for Economic Development would like to thank
the Technical Assistance Committee for their efforts

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I INTRODUCTION

Since 1970 when Congress established the Environmental Protection Agency (EPA) to implement and enforce national air-quality standards under the Clean Air Act considerable economic and legal challenges have surfaced which question the efficiency and legitimacy of federal and state environmental regulations. The 1970 legislation and subsequent amendments were also significant in that they set in motion the creation of unprecedented federal and state regulations directed at controlling environmental quality. The Clean Air Act was soon followed by other major Federal environmental legislation including the Clean Water Act, the Safe Drinking Water Act, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the Noise Control Act, and the Comprehensive Environmental Response, Compensation, and Liability Act.

What began as a legitimate national response to the serious issue of environmental degradation has resulted in an administrative quagmire that has produced regulations with arguably a negative cost/benefit to society. As a prime example, economists often point to the 1972 Water Pollution Control Act Amendments which required the EPA to develop specific effluent limits on waterborne pollutants for each type of industrial process. By 1977 the effluent limits were to be consistent with the use of "the best practicable control methods" and by 1983 tighter limits based on "best available technology" were to be enforced. The economist argument is that regulations, however

detailed, cannot be written to cover all the individual situations that arise. Once determinations are made on a case-by-case basis involving regulators, administrative hearing panels, and ultimately the courts, the standards for environmental regulation break down. The ineffectiveness of EPA policy is certainly one of administrative overload, but moreover, one of imprecise knowledge on the alternative ways to reduce pollution that vary widely in effectiveness and cost for different industries.

Perhaps nowhere have the limits of regulatory control been more pronounced than in the implementation of the 1980 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). It was the regulatory intent of the EPA under CERCLA's Superfund program to respond to emergencies at uncontrolled sites, clean up the sites, and manage any other related problems. Individual states responded by enacting their own hazardous waste laws to deal with the smaller and more numerous uncontrolled sites not addressed by the Federal Superfund program.

On March 23, 1983, the Massachusetts Legislature enacted the Massachusetts Oil and Hazardous Materials Release Prevention and Response Act, better known as Chapter 21E. The specter of 21E has loomed over the State's business and industry for the past eight years. The idiosyncratic twists of this piece of legislation has left many industrial owners and developers mired in confusion and even helplessness. On October 3, 1987 the Massachusetts Contingency Plan (MCP) went into effect which set

forth regulations that detail the comprehensive process necessary for remediating a contaminated property. Ironically, the MCP has made the process of site remediation more burdensome for both industry and the State's Department of Environmental Protection (DEP), whose responsibility it is to administer the regulations.

The purpose of this paper is to provide an economic development perspective on the problems encountered with the implementation of Chapter 21E in the State of Massachusetts. This perspective is particularly relevant in light of proposed amendments to the Law which are expected to go into effect by July of 1992. The proposed amendments are significant from both the State and federal level in that the legislation will privatize the response actions at disposal sites and provide more flexible, case-by-case standards for the containment and remediation of both priority and non-priority sites. The proposed amendments are a major departure from the "command and control" environmental regulations of the past two decades. Therefore, the paper will devote special attention to the new legislation and how these changes may alleviate much of the confusion and rancor that has existed under the current 21E Law.

II LEGISLATIVE BACKGROUND

The efficiency and effectiveness of environmental regulations have long been a topic of heated debate among private industry, environmentalists, economists, and public policymakers. While the arguments are many and complex, both pro and con, the core of the debate is essentially one of degree of social intervention. Interestingly, even conservative economists recognize the negative externalities associated with industrial pollution and the need for a public response to the market failure. However, most economists and certainly private industry would argue that the "command and control" methods employed by the Environmental Protection Agency (EPA) in establishing environmental standards is both inefficient and wasteful.¹

Environmental groups and the majority of our nation's policymakers need only point to the levels of pollution and tons of hazardous wastes produced each year in the United States to make their case for strict environmental standards. In fact, the prevalent view among the public and in Washington is that the air and water legislation enacted in the 1970's led to important gains that must be preserved and strengthened by resisting the efforts of industry to weaken the laws. Environmental lobbyists continue to effectively portray the industrialist as the fat, cigar-smoking "bad guy" with the toxic waste pipe protruding from the rear of his factory. This exaggerated image, which industry has been effectively lax at shedding, is given credence with the memory of Love Canal indelibly implanted in the minds of many

Americans, and more recently supported by a 1987 EPA study that estimated 550 million pounds of toxic substances have been dumped into our nation's waters.

As a result of earlier and similar findings, the Resource Conservation and Recovery Act (RCRA) of 1976 was enacted to manage the amounts of newly generated hazardous wastes. Not long after the passage of this legislation, it became apparent that a separate federal program was needed to manage the cleanup of previously contaminated or uncontrolled hazardous waste sites. In 1980, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) was established.

At the time of enactment, the extent and scope of the problems that the CERCLA program would be facing at these uncontrolled sites was not clear. There was little scientific and comprehensive understanding of the risks associated with hazardous releases, especially with the long-term effects. As a result, Congress limited the scope of the Superfund program by directing the EPA to set up a Hazard Ranking System to obtain a numerical rating for sites which would then determine whether or not a site would be included on the National Priority List (NPL). A site had to be listed on the NPL before it could be considered for any site remediation. The Superfund program was directed to list at least 400 sites on the NPL which needed remedial cleanup. In spite of the controversy over the amount needed to support the Superfund program, Congress limited the program to \$1.6 billion over 5 years.²

Due to the limited nature of the Federal Superfund Program,

some states have enacted their own State Superfund program to deal with the smaller and more numerous uncontrolled hazardous waste sites within their state lines. Massachusetts became one of the first states in the nation to enact its own superfund law.

The Massachusetts Superfund Law (M.G.L. Chapter 21E), enacted by state legislators in 1983, gave the Department of Environmental Protection expanded authority to require the assessment and cleanup of hazardous waste sites by the private sector. It also directed DEP to proceed with work when private parties failed to act in a timely manner, and authorized the agency to recover up to three times its response action costs from those parties.

Amendments to the Superfund Law, in the form of an initiative petition overwhelmingly supported by voters in 1986, set specific requirements and timelines for DEP's progress in identifying, assessing and cleaning up contaminated properties. Among other things, the amendments required the agency to identify at least 1,000 suspected hazardous waste sites per year, complete investigations of sites within two years of their being listed, and ensure completion of a permanent remedy within four to seven years, depending on site classification.³

Massachusetts Chapter 21E parallels both CERCLA and the Federal Water Pollution Control Act (FWPCA). Chapter 21E, Section 3 requires that the DEP take all action appropriate to secure to the Commonwealth the benefits of CERCLA, FWPCA and other pertinent federal laws. Under Section 3, the DEP shall

promulgate such regulations as it deems necessary for the implementation, administration, and enforcement of 21E, FWPCA, CERCLA and other pertinent laws.

Section 3A of the Law provides that the DEP, in developing its initial list of locations to be investigated, consider any existing lists of potential disposal sites previously compiled by the EPA. Section 3A(k) goes on to state that the DEP make every effort to provide the documentation required under CERCLA in order to make sites eligible for federal response action monies.⁴

Chapter 21E consists of eighteen (18) Sections each dealing with the roles and responsibilities of the DEP and Potentially Responsible Parties (PRP's). From a legislative perspective there are five (5) key provisions of the Law which should be highlighted:⁵

Section 4 - Response Action Authority

The DEP, whenever it has reason to believe that oil or hazardous material has been released or that there is a threat of release of oil or hazardous material, is authorized to take or arrange for such response actions as it reasonably deems necessary. This Section involves the three (3) distinct and critical phases of the response action: site assessment, containment action, and cleanup and removal.

Section 5 - Liability Provisions

This Section defines Potentially Responsible parties as current owners, past owners, transporters, and any person who otherwise caused or is legally responsible for a release or threat of release of oil or hazardous material from a vessel or

site, shall be liable, without regard to fault to the Commonwealth for all costs of assessment, containment, and removal pursuant to Section 4.

Section 7 - Notification

Any owner operator of a site or vessel, and any person otherwise described in Section 5, as soon as he has knowledge of a release or a threat of release of oil or hazardous material, shall immediately notify the DEP at once.

The principal appeal in this Section is that it is not a crime to be a PRP, but failure to notify is criminal!

Section II - Civil Penalties

The presumption is that any violation of the Law shall be presumed to constitute irreparable harm to the public health, safety, welfare or environment.

Fines can be up to \$25,000 for each violation and two years imprisonment. However, for persons in violation of Section 7, a fine of up to \$100,000 or imprisonment in the State prison for not more than twenty years or in a jail or house of correction for not more than two and one-half years or both, for each violation. Each day such violation occurs or continues shall be considered a separate violation.

Section 13 - Lien Provisions

Any liability to the Commonwealth under the Law shall constitute a debt to the Commonwealth. The debt plus interest at a rate of 12 percent per annum shall constitute a lien on all property owned by persons liable under Chapter 21E. Any lien recorded, registered or filed pursuant to this section shall have

priority over any prior encumbrances with respect to any site other than real property devoted to single or multi-family housing.

Since its adoption in 1983, there have been two (2) significant amendments to 21E which have further strengthened the Law's regulatory provisions. Section 3 "authorized and directed" the DEP to prepare the Massachusetts Contingency Plan (MCP) and Section 3A - the 1986 Ballot Question 4 Amendment - provided timetables and specifications for action at disposal sites.

The Massachusetts Contingency Plan set forth regulations which establish requirements and procedures for identifying, evaluating and cleaning up releases of oil or hazardous materials. These matters had been previously governed by the general provisions of 21E.

The MCP put forth regulations that detailed the comprehensive process necessary for addressing contaminated property. Directed primarily at historic contamination, the MCP begins the process with notification requirements, then proceeds to placement of the site on a list and then through a number of phases of investigation and remedial response actions. All of these aspects are described in brief below.

Site Investigation and the Remediation Process

Notification Requirements

The MCP explains in detail how to report to DEP when a release of oil or other hazardous substance is discovered. The notification rules apply to any "release or threat of release" which occurs after August 31, 1988. Pre-existing contamination

is also governed by Chapter 21E. For new and potential releases, the MCP states that any person who is liable under Chapter 21E is held responsible to notify DEP "as soon as possible but not more than two hours after obtaining knowledge of a release or threats of release to the environment...unless the person responsible for notifying persuades the Department that extenuating circumstances prevented such notification." The penalties for failing to report are substantial fines and/or imprisonment.

The notification regulations define how to determine whether or not the substance released is oil or a hazardous material. The rules also define reportable quantities of oil or hazardous materials, the release of which determines the reporting obligation. The MCP states that the notification rules do not only apply to an accidental spill but also to a continuous or intermittent release.

Site Listing Most places where there is either an oil or a hazardous substance release is called a "disposal site." These sites are subject to the MCP requirements and regulations. DEP maintains four classification lists of disposal sites:

- Locations To Be Investigated (LTBI) - locations which DEP considers likely to be disposal sites;
- Confirmed Disposal Sites
- Remedial Sites - sites which have been cleaned up to DEP's approval; and
- Deleted Sites - sites which for one reason or another no longer need remediation.

Site Assessment and Remedial Response

The MCP dictates five stages of remedial response actions that the Potentially Responsible Party must go through. These stages go from the initial assessment of site contamination the final cleanup and monitoring of the site. Deadlines are imposed which should assure the completion of DEP criteria at different stages in the process. Failure to meet a deadline is in violation of the MCP and threatens civil and administrative penalties.

1) Preliminary Assessment (PA):

The PA is the initial evaluation of a site which determines whether it is a disposal location, whether any immediate clean-up measures need to be taken or whether further remedial response actions need to occur. The PA must be completed one year from the initial listing of the site on the LTBI or Disposal list.

2) Phase One - Limited Site Investigation:

Phase one investigation confirms that the location is a disposal site. It provides information to DEP so that it can classify the site as either a priority or non-priority disposal site. This classification determines the degree of attention the site receives from DEP and the ability of the Potentially Responsible Party to bypass certain DEP requirements through a waiver. Classification as a priority site results in the site being placed on a fast-track cleanup schedule and it may also trigger public involvement requirements.

3) Phase Two - Comprehensive Site Assessment:

The Comprehensive Site Assessment is just what its name

implies, a comprehensive investigation and assessment of the environmental risks and problems at the site. This phase determines the extent and nature of the contamination, determines the type and quantity of oil or hazardous substance and characterizes and evaluates the risk to the public and environment presented by the site. A phase two report must be presented to the DEP for approval.

One of the most significant aspects of this phase is the risk characterization provision. The MCP requires that the level of contamination at the site be compared to nationally-recognized standards. It also may require a process that attempts to scientifically and numerically determine the health risks posed by the site. If the level of contamination exceeds the national clean-up standards, the site must be cleaned up accordingly. An exception would be if the levels of contamination that exist at the site after removal of the disposal site's contaminants still exceed the pertinent national standards. In this case, DEP may approve a remediation process that cleans the site only to the background levels.

There is no deadline for completion of this phase, however, there is a deadline for implementing the chosen remedy which drives this time frame.

4) Phase Three - Development of Remedial Response Alternatives and the Final Remedial Response Plan:

After completion of Phase Two, the PRP must develop a number of alternatives for site remediation, evaluate their feasibility and recommend one for approval by DEP. The MCP specifies

different categories of alternatives that fall under on-site treatment, off-site treatment, on-site containment or disposal, off-site disposal and no action. The recommended response action must be one that meets the clean-up standards identified in Phase Two.

A Phase Three report, which includes the proposed remedy, must be submitted to the DEP for approval. It may be submitted concurrently with the Phase Two report with prior permission from the DEP.

5) Phase Four

- Implementation of Approved Remedial Response Alternative:

Phase Four involves three activities: the development of a Remedial Response Implementation Plan; the construction, initial operation and maintenance of the proposed remedy; and the preparation of the final inspection report upon construction completion. Both the plan and the report must be submitted to the DEP for approval.

The MCP requires that priority disposal sites have a permanent or temporary solution implemented within four years of initial listing as an LTBI. Non-priority disposal sites must have a Final Remedial Response Plan completed within seven years. Once there is satisfactory completion of Phase Four activities, DEP determines that the work has been completed and approves the final inspection report.

Short-Term Measures:

The MCP states that when and if situations arise that pose an immediate threat to human health or the environment, an

immediate response is required in the form of "Short-Term Measures." A Short-Term Measure is not subject to the lengthy requirements described above, although once completed it must go through the remaining phases of remedial response. DEP approval must be obtained before initiating a Short-Term Measure.

Although the MCP provides for procedures whereby the extent and nature of a release or threat of release of oil or hazardous material can be "consistently" and "appropriately" addressed, the regulations do not specify the time frame for DEP approval. Industry will also argue that there are no clear standards and guidelines for assessing and cleaning up contaminated sites.⁶

The MCP is intended to complement the National Contingency Plan by setting forth the roles and responsibilities of the DEP, Potentially Responsible parties, other persons, other governmental agencies, and the public in response actions. While the MCP does provide procedures and guidance for notification and responsibility under the Law, it has been apparent for the past several years that requirements relative to the assessment and response to disposal sites has been ambiguous and often confrontational for both governmental officials and industry.

The following chapters review the problems associated with the current 21E Law, including several case studies involving industrial sites. Lastly, the proposed 1992 amendments to the Law will be assessed to determine whether privatizing hazardous waste cleanup might improve the efficiency and effectiveness of the program.

III THE 21E PROBLEM

Many of the problems associated with 21E can be directly attributed to those subsequent amendments to the Law which, though well intentioned, were void of effective public policy deliberation and action. The 1986 Voters Amendment, also known as Section 3A of the Law, required that the DEP establish timetables and specifications for action at disposal sites. Under the amendment, plans were to be developed which specified future staff, equipment, funding and resource needs, the timing of those needs, and changes in current staffing and equipping procedures necessary to ensure that the program will conform to the requirements of the Law and the amendment without undermining the progress of any other programs of the Department.⁷ In response, State lawmakers in 1987 authorized 519 DEP staff positions to implement the expanded voters demand. However, due to budget cuts in recent years the Department's waste site cleanup staff has never exceeded half the authorized level. With a current staff of 220, DEP is unable to meet most of the demands contained in the Superfund Law Amendment.⁸

As the DEP was formulating its timetables and specifications under Section 3A, the Massachusetts Contingency Plan (MCP) went into effect. Originally part of the 1983 Legislation, the MCP, which became effective on October 3, 1987 established requirements for responding to releases and threats of releases of oil and hazardous materials in the Commonwealth. Prior to the MCP property owners could proceed at their own risk with the

cleanup of a contaminated site. Instead, owners must now obtain prior approval from the DEP at each of five (5) separate stages of the cleanup process.⁹ As summarized in the preceding Chapter, the MCP requires that an owner of a site notify the DEP upon knowledge of a release. Therefore, if a Phase I investigation shows that a release has occurred, no additional work can be performed on the site to further "assess" or "cleanup" a release without DEP involvement.¹⁰

With DEP approval, or the obtainment of a Waiver (if certain conditions are met) a Phase II - Comprehensive Site Investigation can be performed. This typically consists of extensive subsurface evaluation to determine the source and extent of release. This phase concludes with a Risk Assessment which determines the risk that the release poses to the surrounding environment. Alternatives are explored and the Final Remedial Response Plan is designed. Phase IV consists of the implementation of this plan and Phase V deals with the operation and maintenance of the remediation method, if necessary.

The "phased approach" outlines the methodology involved in evaluating real estate for environmental liabilities. A thorough Preliminary Assessment consists of research into the history of a site and its surrounding properties to determine if historical uses may have adversely affected the site. Research resources may include the fire department, clerk's office, assessor's office, board of health, building inspector, library, planning office, sewer and water departments, registry of deeds, historical society, present and past owners, operators and

abutters, and the DEP.

The combination of the 1986 Amendment (Section 3A) and the 1987 MCP has created a bureaucratic overload for the process of hazardous waste cleanup. Owners of contaminated sites and other PRP's have sarcastically remarked that the paper generated before work can even begin could probably soak up the chemicals of most spills.

The Morphology of a 21E Investigation and Response - The Borden
Chemical Company, Leominster, Massachusetts

As previously discussed, the 21E process involves a variety of actors, each with opposing values, interests, and motivations. A confrontational problem also exists due to the lack of clearly defined and agreed upon standards for risk assessment and the permanent solutions for hazardous waste sites. So while the MCP responds to the public's clear mandate by establishing a cleanup process that is consistent, strict, and highly protective of public health and the environment, the technology and science of hazardous waste cleanup lacks clarity and consensus concerning the most effective and efficient standards to be employed. The result is that interminable delays have become commonplace with no guarantee that in the end clean is clean enough.

The Borden Chemical site in Leominster, Massachusetts is representative of the problems inherent in the 21E process. The Borden Company ceased its manufacturing operations in 1987, some thirty two years after setting up operations and assuming the

production of vinyl acetate from American Polymer.

In a letter dated October 24, 1989, the Borden Chemical Company was notified by the Massachusetts Department of Environmental Protection that their property was classified as a "priority disposal site" pursuant to the Interim Site Classification Contingency Plan. Although hydrogeologic assessments were being performed on the site since April of 1987, the new DEP classification required that no further remedial response actions could occur without first obtaining DEP's approval at the required phases under the Massachusetts Contingency Plan.

Historical accounts indicate that the Borden Chemical Company constructed a polyvinyl chloride (PVC) resin plant in 1956 and produced PVC resins from polyvinyl chloride monomer (VCM). A PVC compounding plant was used to mix the PVC resin with modifiers and stabilizers to produce clear PVC pellets for blow molding. The American Polymer's operation most likely became one of the Polyco plants which produced latexes of polyvinyl acetate, polyvinyl chloride, and acrylics; vinyl acetate monomer, and glacial acetic acid. A Styrene-Butadiene operation was also in place at one time along Aspinwall Avenue, however, the compounding plant and styrene-butadiene plants were closed sometime in 1974 or 1975.¹¹

The major waste producer on-site was most likely the PVC resin plant. A 1974 EPA study described the polymerization process as follows:¹²

The Suspension PVC Polymerization Process

VCM Storage Spheres - At Borden, there are two VCM storage spheres, each with a capacity of 230,000 gallons. Liquid VCM is brought in by rail. The VCM gas in the spheres is pumped into the railroad car which forces the liquid VCM out of the car into the spheres. When all the liquid is drawn out, a vacuum is drawn on the line and excess gas vapors in the railroad car are sucked back into the spheres. A positive pressure of approximately 2 psi is left in the car to prevent air from entering the car.

1) During plant operation, approximately 225 tons per month of sludge consisting of settled solids from the various wastewater streams accumulated in the waste lagoon. The normal capacity of the lagoon was 1,500,000 gallons and its maximum capacity was 2,200,000 gallons. Liquid effluent from the lagoon was discharged to Leominster's POTW for treatment and subsequent discharge into the Nashua River.

Approximately every 2-3 years, accumulated sludge in the lagoon was dredged and transported to the municipal landfill for disposal.

2) During plant operation, approximately 65 tons per month of scrap resins, off-spec product and reactor cleanings were stored above ground in the southern portion of the holding lagoon. After aging, the waste resins were incorporated into the settled sludge for subsequent landfill disposal.

3) Vinyl chloride gas was derived from a wastewater "stripper" and incinerated. The stripped wastewater was neutralized and discharged to Leominster's POTW.

- 4) During plant operation, approximately 20 tons per year of waste cleaning solutions and 2 tons per year of resorcinol were stored in tanks or drums for subsequent shipment and disposal in an approved secure landfill.

It should be noted that the above and below ground tank storage areas, chemical transfer areas, and drummed storage areas for waste and process chemicals are such that inadvertent spills or leakage would either discharge directly into the ground or into the storm sewers which eventually discharge into the Nashua River. Therefore, each of these areas was evaluated during the investigation.

Based on raw materials usage reports, potential contaminants may include the following:

PRODUCTION CHEMICALS

<u>CHEMICAL</u>	<u>PRODUCTION QUANTITY USED (approx.)</u>
vinyl chloride	7,000 tons/month
vinyl acetate	400-500 tons/month
ethyl acrylate	9 tons/month
d-n-octylphthalate	4-5 tons/month
n-butyl acrylate	5 tons/month
trichloroethylene	3-4 tons/month
methyl methacrylate	1/2 tons/month
butadiene	unknown
styrene	unknown

MISC. OTHER CHEMICALS

(i.e., waste cleaning solutions, laboratory chemicals, etc.)

acetone

cyclohexane

diethyl phthalate

phenol

methyl ethyl ketone

methanol

recorcinol

The hydrogeologic assessment dated April 10, 1987 identified volatile compounds including trichloroethylene, vinyl chloride, benzene, toluene, and phenol in soils and groundwater. On March 27, 1989 five (5) monitoring wells sampled noted vinyl chloride, TCE, and styrene which were processed in large quantities on the site until the plant processing facilities were closed down in 1986.

Based on the hydrogeologic assessment the following areas were identified as those areas where past operational activities would have been most likely to have resulted in a potential impact on the subsurface soils and/or ground-water:

- 1) Lagoon located within the valley between the upland areas.
- 2) RCRA Drum Storage Area located south of the old Compound Plant.
- 3) Old Drum Storage Area located east of the Polyco Building.
- 4) Maintenance Drum Storage Area located adjacent to the Maintenance Shop.
- 5) Laboratory Drum Storage Area located east of the Laboratory.
- 6) Above and Below Ground Polyco Tank Farm Area located north of the Polyco Building.

- 7) Below Ground Fuel Oil Tanks Area located west of the security office at the plant entrance.
- 8) Mounded Tank Area located west of the RCRA Drum Storage Area.
- 9) Styrene/Butadiene Above Ground Tank Area located in valley west of lagoon.
- 10) Wastewater Above Ground Tank Area located in the western most portion of the valley.
- 11) TCE/Vinyl Acetate Above Ground Tanks and Materials Transfer Area located west of the PVC Building.
- 12) Bulk Silo Storage and Transfer Area located immediately adjacent and south of the PVC Building.
- 13) PVC Railroad Transfer Area located along the western property boundary.
- 14) Old Styrene/Butadiene Plant Area located on the southern upland terrace.
- 15) Old Compound Plant Loading Area located immediately adjacent and south of the Compound Plant.
- 16) Steam Plant Area located east of the lagoon.

Under the monitoring and supervision of the DEP, remediation work has commenced on the site. Initial hazardous waste removal has been confined to the PVC tank farm area and silos located south of the lagoon and in close proximity of Fall Brook.

With the confinement of hazardous wastes at the site, and subsequent DEP approval of a remediation plan, the Borden Company in May of 1991 submitted a "Waiver of Approvals" application to DEP's Bureau of Waste Site Cleanup for a twenty-acre portion of the site determined to be "non-priority." The MCP allows those

conducting response actions at non-priority disposal sites to apply for a waiver of required approvals. A waiver of approvals provides the opportunity for accelerated remediation of non-priority disposal sites. Waivers are granted to PRP's or other persons who have engaged an expert in the field of oil and committed to conducting a remedial response action in a timely manner and in accordance with the Law and the MCP. When a waiver is granted, remedial response actions still must meet all the requirements of the Law and the MCP, including submittal of all documents of the DEP. However, approvals of reports and plans are not required by the Bureau of Waste Site Cleanup as long as the waiver remains in effect. A waiver of approvals will expedite the performance of a remedial response action.¹³

The DEP initiated a sixty (60) day review period of Borden's Waiver Application by issuing a notification to the City of Leominster's City Council, Board of Health, and Fire Department which also elicited their comments. In August of 1991, the Waiver of Approvals application was approved by the DEP and a Final Response Plan was prepared by the Borden Company's engineering contractors. Site remediation of both the priority and non-priority locations of the entire Borden property continue on at present, approximately four and one-half years since the Company performed its initial hydrogeologic assessments.

The Borden 21E site is characteristic of the hazardous waste cleanup problems associated with older industrial properties, specifically, those which housed mature industries such as plastics, furniture, and paper. The environmental problems

inherent in these sites can trace back to over one hundred years. Clearly, any economic development strategy involving existing and former mill sites must presuppose environmental considerations and potential liability issues. Even in good economic times, the 21E process and resultant liability has directly slowed the rate of industrial growth in the State of Massachusetts.

Banks, who would have to wait for State recovery of any such superlien to get paid off before they could recover their loans, have become increasingly hesitant to lend in what was originally a buyer's market.¹⁴ Whether or not they are actually imposed, just the possibility of superliens has greatly affected the value and marketability of contaminated sites.¹⁵

In today's down economic market it was expected that a decrease in environmental site assessments would occur. Apparently, this has not been the case and the explanation is twofold:

First, when businesses fail and real estate values decrease, banks and financing companies have to deal with more foreclosures. Environmental site assessments are performed on most foreclosure properties to protect the bank from Superfundliability, and also to determine any "environmental costs" associated with the property when estimating its resale value.

Secondly, banking regulators have tightened the internal requirements by which bankers must operate. This adds to the conservative atmosphere in the financial industries and leads bankers to require environmental assessments and testing on

properties which previously may have gone unevaluated.

The simplification of the 21E process is essential if mill sites are to become more valued and marketable industrial properties. As long as regulatory inconsistencies exist, industrial developers and users will have little chance of obtaining project financing, even for the rehabilitation types of improvements that are necessary in old mill buildings.

In the following Chapter, recent and proposed changes to the 21E Law and the MCP will be reviewed and examined to determine whether environmental regulation for hazardous waste cleanup can parallel the need to expand on the economic development potential of older industrial sites.

IV CHANGES TO THE LAW - "SON OF 21E"

Whether it be approval from the local conservation commission or floodplain permitting authority, environmental review and the necessary go-aheads can be frustrating and cumbersome for even the most sophisticated industrial or commercial developer. However, it is the enigma of 21E that has created the single greatest environmental obstacle for the reindustrialization of older, mill communities.

It has become increasingly clear to all concerned parties that the bureaucratization of hazardous waste management has created severe financial hardship for property owners, while actually stalling the decontamination process for which it was intended.

Recognizing the inefficiency and ineffectiveness of many of its policies, the DEP's Bureau of Waste Site Cleanup has issued a series of policy changes in the past two (2) years to respond to certain inadequacies and inconsistencies in the Law and the MCP.

Policy #SWC-601-90 describes the circumstances under which the Department will allow a "Potentially Responsible Party" (PRP) to assume responsibility for response actions at a publicly funded site. The PRP may be "newly identified or one who previously declined responsibility, or who was unable or was not allowed to take responsibility and now would like to do so. The policy identifies assurances the Department needs from a PRP and conditions under which the Department will allow a PRP to take over the responsibility for performing response actions."¹⁷

Additionally, on January 23, 1991, the Secretary of Environmental Affairs and Commissioner of the Department of Environmental Protection announced a joint Memorandum of Understanding (MOU) which formalized the relationship between the Massachusetts Contingency Plan and the MEPA regulations. Specifically, the MOU states that "no ENF (Environmental Notification Form) or EIR (Environmental Impact Report) shall be required for a project that meets only the review threshold established in 301 CMR 11.26(7)(g)2 [permanent on site containment, on site treatment, or off site disposal of hazardous materials where the total project cost (including design and engineering, excluding initial remedial measures) is \$1 million or more], provided that the provisions set forth at 310 CMR 40.204, 310 CMR 40.543(4)(c) and 310 CMR 40.546(7)(c) are followed." The MOU is intended as an interim rule awaiting formal amendment to the MEPA regulations.

These policy changes represent apparent attempts by the State's environmental regulators to both simplify and expedite the 21E review process. They have also run concurrent with the work of a study committee initiated by the Weld Administration which has been meeting for the past year to recommend improvements to 21E and the MCP. The committee has broadbased support including representatives from major environmental groups, the association of bankers, realtors, engineers, and lawyers, and the DEP. Each group has given support and expertise to a new legislative bill detaining comprehensive changes to the existing 21E.

House Bill 5891 would restructure the Commonwealth's Oil and

Hazardous Waste Site Cleanup Program, which is administered by the Department of Environmental Protection under Chapter 21E of the General Laws. Specific provisions of this legislation would:

- Establish a program for the licensing of consultants to act as "site professionals" who monitor assessment and/or cleanup work being performed on behalf of private sector responsible parties (Section 2, which adds sec. 19-19J to c. 21A).
- Authorize DEP to establish a two-tiered classification system delineating the many sites where private parties could proceed without the agency's prior approval and those fewer sites where responsible parties would need to acquire DEP permits before performing work (Section 3, which amends sec. 3(d) of c. 21E).
- Guarantee timely action by the agency on permit applications, require DEP to refund application fees when deadlines are not met and assign a high priority to the review of those applications on which timelines have been missed (Section 1, which adds sec. 3B to c. 21E).
- Provide incentives for private sector responsible parties to undertake assessment and cleanup work on their own, as well as expanded enforcement authority for DEP to require private sector action (Section 28, which adds sec. 4A to c. 21E).
- Authorize DEP to audit private sector assessments and cleanups to ensure that public health and the environment are being adequately protected (Section 23, which amends sec. 3A of c. 21E).
- Clarify the liability of secured lenders and fiduciary trusts

for the assessment and cleanup of contaminated properties, to protect their interests (Sections 3, 4, 6 and 8, which amend sec. 2 of c. 21E).

In addition to accelerating cleanups and removing obstacles to economic development and real estate transactions, the legislation will focus DEP resources on finding and cleaning up the Commonwealth's most serious sites. That reallocation of staff will result in more consistent and timely response to oil spills and other emergencies; a stronger site discovery program, to ensure that the state's most seriously contaminated sites are being found and cleaned up; and the development of clear standards for determining both when sites need to be cleaned up and when they are clean enough.¹⁹

From industries' perspective, one of the most significant aspects of the legislation is the shift in responsibility for assuring cleanup to the private sector, namely private engineers and consultants. The licensing of site professionals (LSP's) with an option of roles-assessment, design and/or oversight was critical to the Bill because the new LSP program should make insurance more available to professionals, partly because the licensing and vetting procedure would gold-plate their credentials.

Another important aspect of the new Bill is the two-tier notification system which should alleviate the lengthy and burdensome priority, non-priority, and waiver structure of the MCP. Except for major or imminently dangerous releases, the DEP will step back from the process, requiring only a single permit

and the hiring of an LSP.

Under House Bill 5891 DEP will put their requirements in writing. Notification, assessment and cleanup criteria will be codified. Deadlines, with money-back guarantees, will be set for permit review. The flowchart for the entire procedure fits on one page and has eight avenues of escape (no further action). The end result will be an easier path out of the Superfund maze. PRPs, by voluntarily starting cleanup, can save time and money and gain the assurance that the DEP will be off their backs for good.²⁰

House Bill 5891 addresses a majority of the concerns heard from industry, engineers, banks, and government officials. The major obstacles to the proposed amendments being implemented are time and money. The Bill must be enacted by December 31, 1991 and implemented under law by July 1, 1992. The major hold-up at this time is funding which is estimated at approximately \$17 million per year. Fees should account for one-half of that amount with the balance having to come from either a new tax or as Governor Weld has suggested the General Fund. Interestingly, the study committee made up of individuals primarily from the private sector endorsed the ideas for dedicated taxes on retail sales of petroleum and a first-use tax on certain hazardous chemicals.

From a regulatory standpoint, HB 5891 presents an opportunity for improving the efficiency and effectiveness of the Massachusetts Contingency Plan. From a legislative standpoint there remains glaring problems with 21E, the Law. Most prominent

is the absence of a long-range plan to address the issues of hazardous wastes. How clean is clean remains unanswered. Moreover, no commitment is given to research and development, and the new technologies required for meeting the long-term problems of hazardous waste identification and remediation.

For the time being, new streamlined regulations are a commendable feat. However, in the long-run, further study is needed to give 21E greater purpose and meaning. The long term challenge for public policymakers is vital to both the economic and environmental well-being of the State of Massachusetts.

V CONCLUSION

Chapter 21E and the Massachusetts Contingency Plan (MCP) have created enormous bureaucratic obstacles for industrial and commercial propertyowners held liable for hazardous waste cleanup. While few would argue with the need for strong legislation forcing hazardous waste site cleanups, the costs and delays associated with the remediation process have created economic disincentives, and has potentially exacerbated the site contamination it was intended to control. The Department of Environmental Protection (DEP), whose responsibility it is to administer the MCP, have too few resources to handle the sites they know that endanger public health and safety.

House Bill 5891, also referred to as "Son of 21E" if enacted will improve the efficiency and effectiveness of the MCP. Industry, bankers, realtors lawyers, and engineers have all supported the proposed legislation. The Bill still faces an uphill battle given the funding level required to implement the new amendments. The \$17 million budget appears justifiable given the \$12 billion overall budget.

The budget issue is a commitment issue for the State, which will also have serious implications nationwide. The commitment issue is one of long-range planning to ensure that substantive changes are made to the Law that would link environmental protection to economic development. New technologies for remediating hazardous wastes would be more forthcoming if a commitment to research and development was built into the Law.

The proposed ideas for dedicated taxes on retail sales of petroleum and a first use tax on certain hazardous chemicals merit consideration. Many economists would argue that taxes of this nature are a far less disincentive to industry than ambiguous laws and imposing regulation. If "best available technology" is to be applied in environmental regulation, than the incentive must exist for industry to develop its own best response.

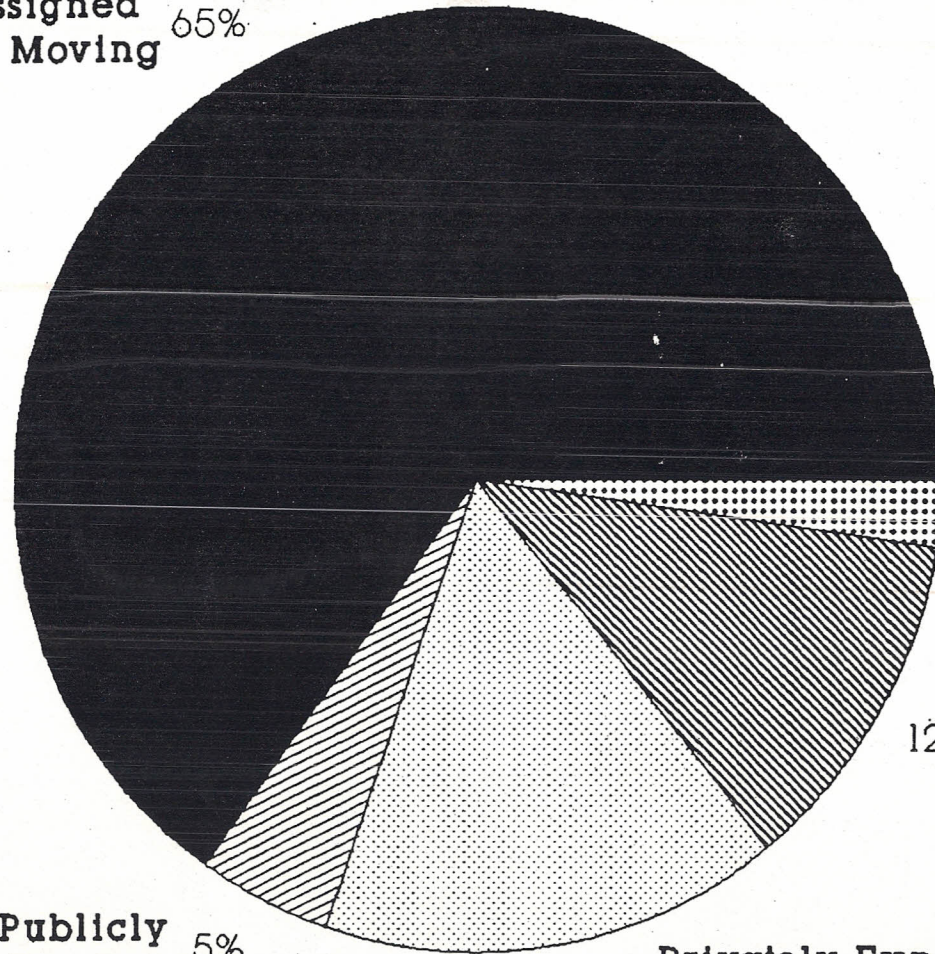
APPENDIX A

RESPONSE ACTION STATUS - DEP

RESPONSE ACTION STATUS

(all sites and locations, as of 9/15/91)

Unassigned
- Not Moving 65%



Unassigned
Priority 2%

Approved
Waivers 12%

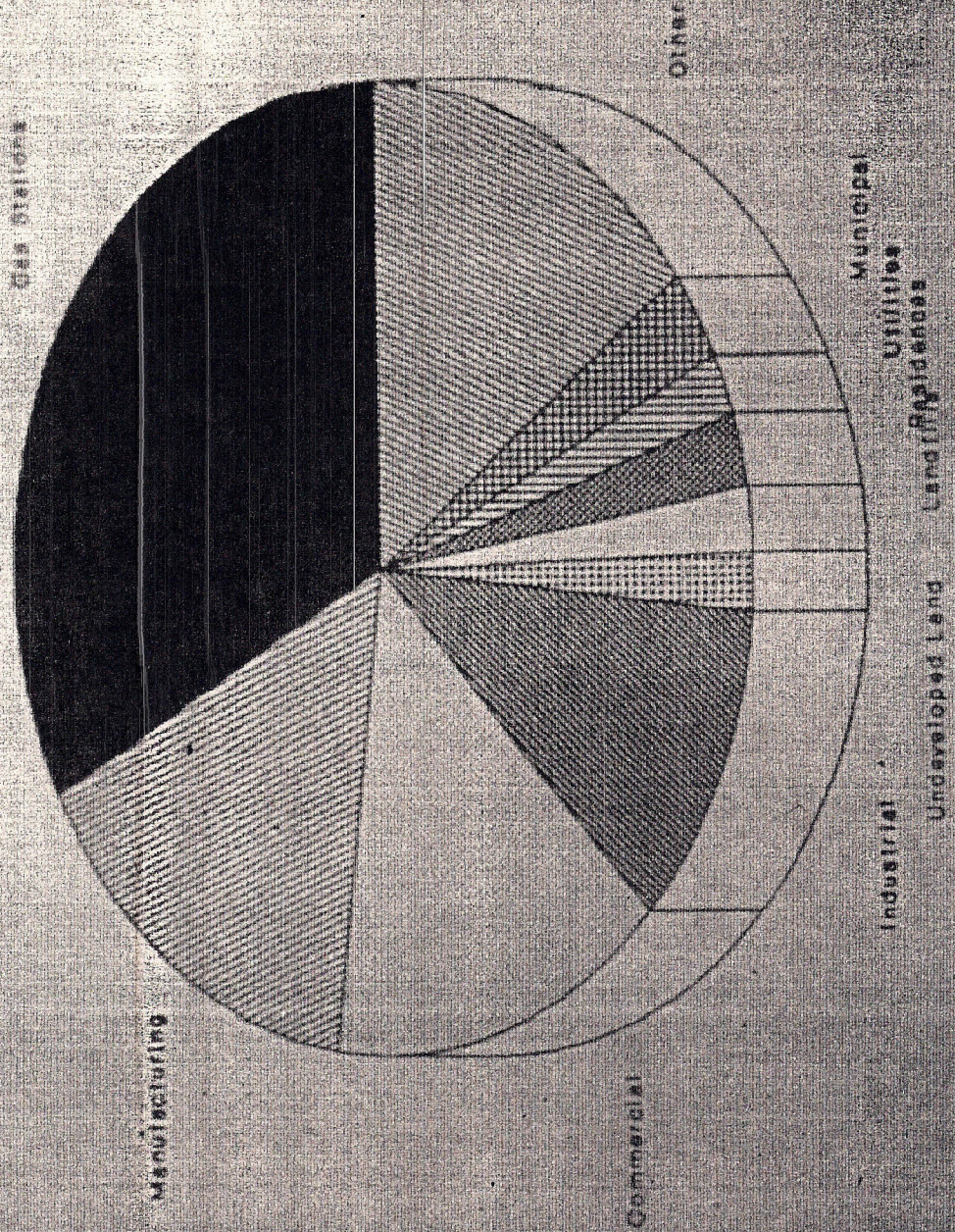
Publicly
Funded 5%

Privately Funded
W/Oversight 16%

Total Number of Sites = 4994

TYPES OF LAND USES AT CONFIRMED SITES

Percent of Total - As of 6/30/90



APPENDIX B

TYPES OF LAND USES AT CONFIRMED SITES - DEP

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