

TOXIC CHEMICALS & HAZARDOUS MATERIALS

IN CAMBRIDGE

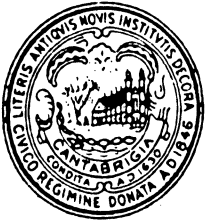
A REVIEW OF THEIR MANAGEMENT AND

A PROPOSED ORDINANCE

Submitted by:

Melvin H. Chalfen, M.D.  
Commissioner  
Department of Health & Hospitals  
City of Cambridge, Massachusetts

May, 1984



CITY OF CAMBRIDGE  
DEPARTMENT OF HEALTH AND HOSPITALS  
1493 CAMBRIDGE STREET  
CAMBRIDGE, MASSACHUSETTS 02139  
498-1349

MELVIN H. CHALFEN, M.D.  
COMMISSIONER

May 17, 1984

Mr. Robert W. Healy  
City Manager  
Cambridge City Hall  
795 Massachusetts Avenue  
Cambridge, MA 02139

Dear Mr. Healy:

The Council Order requesting the development of new policies governing the storage, disposal and transportation of toxic chemical and hazardous materials within the City of Cambridge requires a review of the following four issues:

- 1) The identification of potential hazards.
- 2) A review of existing and proposed legislative and regulatory structures at the federal, state and city levels with particular attention to the monitoring of air, water, and the use, transportation and disposal of hazardous materials.
- 3) A review which determines whether the resources allocated at the federal and state levels are sufficient to carry out the goals of legislation.
- 4) A review which determines whether there are questions pertaining to the safe management of hazardous materials in Cambridge which are not addressed by federal and state regulations; and whether there are necessary measures insufficiently funded by current budgets: What does Cambridge need?

In the pages that follow, I have provided an overall "guide" which should enable the reader to gain a comprehensive picture of existing and proposed legislative and regulatory structures at the federal, state and city levels. It is my intention that such a guide, while not exhaustive in detail, will provide the reader with a comprehensive framework which should serve as an introduction to the complex questions and legislation that concern us all. The guide is written intentionally for the layperson. Technical detail and terminology have been avoided. My hope is that such a guide will encourage each reader to pursue the questions discussed in greater detail, using the guide as a reference tool for gaining further information. I have tried to facilitate such further learning by

providing tables, graphs, and selected copies of key legislation.

On the basis of the review which I have undertaken, and as the prepared guide will indicate, the following measures should be considered priorities:

- 1) It has been recommended by the State that the Payson Park Reservoir, which is an integral part of the Cambridge Water System, should be covered in order to prevent various contaminants from entering the water system. Plans to implement this costly measure are being considered.
- 2) Alternative methods of water pollution control which may substitute calcium compounds for sodium compounds are being considered.
- 3) More efficient treatment equipment should be added to the Cambridge water system, thus enabling the system to handle the increase of leafy materials which collect in the filtration process during the summer months. Ozonation should be considered.

I further recommend:

- 1) The Public Health Subcommittee of the Cambridge Health Policy Board should review DEQE's assessment that Cambridge air is sufficiently monitored. The lack of air monitors for pollutants such as carbon monoxide, nitrogen dioxide, ozone, and particulate matter in areas of construction and high traffic density, such as Harvard Square, is of some concern and should be reviewed.
- 2) An ordinance be written which provides for the protection of public health and welfare in relation to the identification, use, storage, disposal and transportation of toxic chemical and hazardous materials within the City of Cambridge. This ordinance shall supplement existing federal, state, and local regulations.
- 3) It should be noted that the provision of a Cambridge Ordinance will: provide for the identification of hazardous materials; initiate a permit system; provide for proper monitoring services; and provide for adequate supervision of storage, use, and transportation of hazardous materials through a coordinated system of information pooling and communication among the municipal departments of the City of Cambridge, the Municipal Coordinator, the Public Health Subcommittee, and the City Manager. Further, these provisions should aid the City's capacity to provide a comprehensive emergency response ability, particularly in relation to fires involving toxic materials.
- 4) The implementation of the Cambridge Ordinance would be facilitated by the assistance of a Public Health Analyst and by a system of information storing and retrieval which could be provided through a computer system. I am recommending that the City of Cambridge provide these two measures of implementation.

A Public Health Analyst can interpret the complex data made available from the Cambridge Ordinance and the Right to Know Act as well as increase the City's ability to make use of information available from mortality and morbidity statistics and the frequency and

occasion of diseases within the City.

The Cambridge Ordinance and the Right to Know Act will provide an enormous amount of useable data that needs to be collected, sorted, stored and made available for recall and coordination if the complex system of safety management is going to proceed according to a preventive model of health care and safety maintenance. A computer system makes possible such a preventive model.

This system would allow a thorough city building inventory which would provide the following information:

- a) location of flammable materials
- b) location of hazardous materials
- c) identification of violations and inadequacies

- 5) I recommend that the Municipal Coordinator (see the Right to Know Act) meet regularly with the Heads and Chiefs of Municipal Departments. Such meetings are in order given the regular responsibilities of Heads and Chiefs. For example, the Fire Department issues permits for sites where certain classes of dangerous materials are stored and used. Inspectional Services issues permits certifying that construction is done in compliance with building codes. Police and Department of Traffic and Parking have knowledge of trucking routes and frequency and density of traffic. This group is referred to as "The Working Group of Heads & Chiefs."
- 6) I recommend that the Municipal Coordinator meet regularly with a group of representatives of Users of Hazardous Materials. The Users group will be expected to provide detailed information as to how such substances are used and stored. These representatives may be the Safety Officers of various facilities.
- 7) Information from the Working Group of Heads & Chiefs and the Users or Safety Officers Group may be reviewed by the already existing Public Health Subcommittee of the Health Policy Board. The Subcommittee is a group of Cambridge residents with particular interest in public health, who have been already appointed by the City Manager.
- 8) I recommend that the Department of Traffic and Parking study the control of truck routes: times of entry and passage are of particular concern. In addition, under the Right to Know Act, further studies would strengthen our knowledge of where hazardous materials are being carried and stored within the City. It should be determined whether certain trucks carrying especially hazardous materials should be banned from specifically designated, densely populated areas; or whether there should be limited times when entry and passage are permitted.
- 9) I recommend that information from the Scientific Advisory Committee of scientific experts be studied and reviewed in order to assess the present research activities of the Arthur D. Little Co. A Scientific Advisory Committee is difficult to assemble for many reasons which include time commitments and vested research interests. However, such a committee can be called and should be expected to function for the duration of specific, necessary studies.

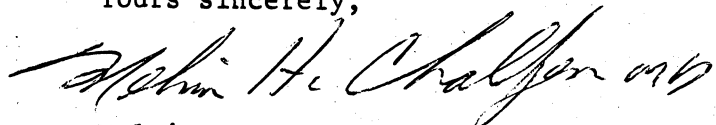
Finally, as Commissioner of Health and Hospitals and as a citizen of Cambridge, I wish to speak directly to the public concern and anxiety that has been felt on the part of many Cambridge citizens in relation to the research activities of the Arthur D. Little Co. As Commissioner, I am especially concerned with the health and safety of Cambridge citizens. The prepared guide and Ordinance provided by the Commissioner's office makes clear the necessary measures for ensuring safety. However, security is more than a physical state of well-being. Security is also a psychological state of well-being.

For two decades there has been increasing concern with environmental pollution. In more recent years, even greater concern has been felt as toxic wastes and hazardous materials, improperly controlled, have become a serious threat to the health of many citizens: Times Beach, Love Canal, Woburn, and the use of EDB come to mind. As a result of these events, public trust in the assurances that some government agencies and experts have provided has eroded. A general skepticism has emerged about how well the mandates from Congress to protect the public health are implemented. In some circumstances, for example, it is clear that the missions of various agencies actually conflict sufficiently with each other to weaken the goal of interest to us all, the protection of the public health. As a result, many people feel "helpless" or "hopelessly ignorant" as they feel increasingly dependent upon the decisions of others--some of whom are experts--to determine the safety of their lives.

Because of the particular concerns which have come to public attention in the Arthur D. Little matter, I feel it is especially important to emphasize that safety and well-being at the local level of Cambridge is dependent upon the cooperation and communication of key persons and committees. It is for that reason that I am recommending that working groups be in communicative connection with one another; that the Public Health Subcommittee review decisions and policies; that public education be an integral part of policy advising; and that complex collections of vital data be made available to the City Council and to all those persons and committees responsible for the health and safety of Cambridge and its citizens.

Safety is especially dependent upon the competent and conscientious efforts of Safety Officers who work to ensure actual safety in the workplace and in the community. It is also the task of Safety Officers to ensure compliance with federal, state and municipal regulations. In addition, it is the well-maintained network of communications among Department Heads and Chiefs, Users of Hazardous Materials, the Scientific Advisory Committee, the Commissioner of Health and Hospitals, the Public Health Subcommittee, the City Manager, and the City Council which ensures the cooperative maintenance of safety on a daily basis at every level of City life and makes possible the sense of confidence and public trust which results from actual safety; the sharing of collective responsibility and competency; and the participation of informed and educated citizens.

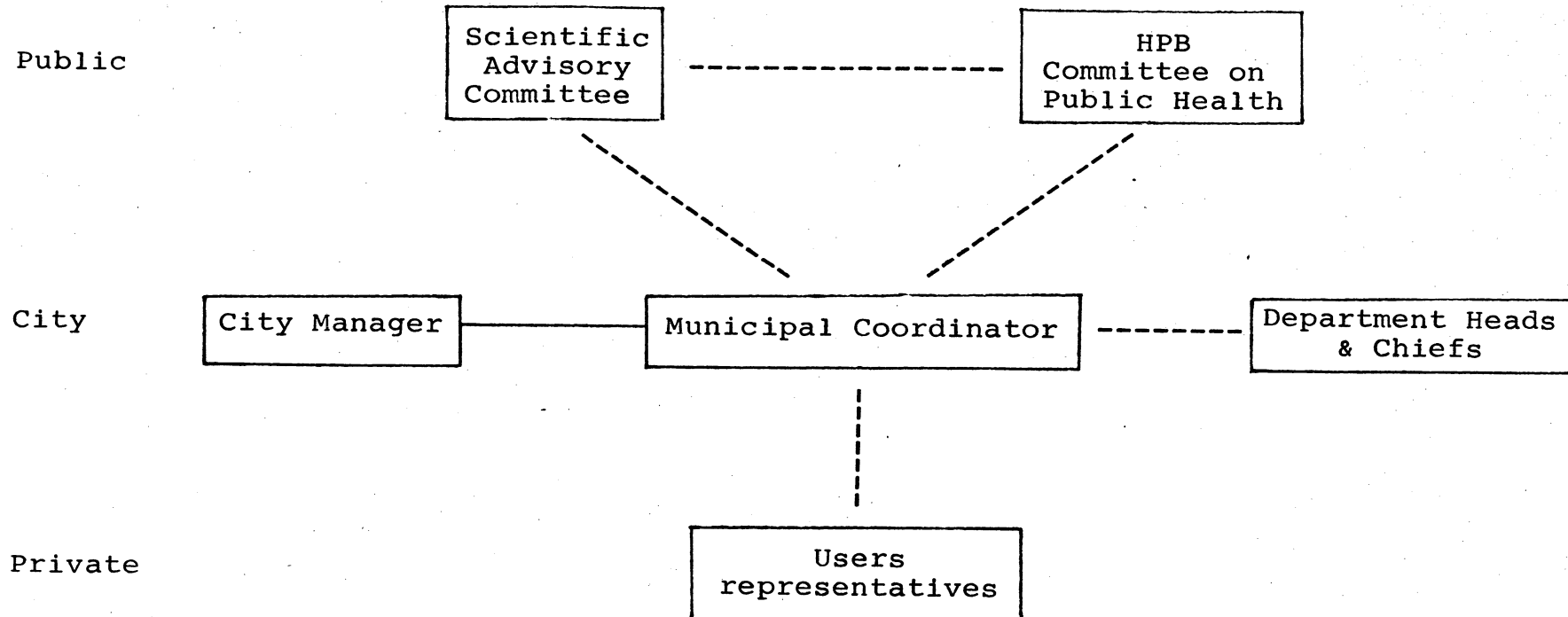
Yours sincerely,



Melvin H. Chalfen, M.D.  
Commissioner

Enclosures

PROPOSED CAMBRIDGE HEALTH AND SAFETY STRUCTURE  
FOR TOXIC AND HAZARDOUS MATERIALS:  
the public, private and city relationships



## ACKNOWLEDGMENTS

I would like to thank all of those who have helped with both advice and criticism in the preparation of this report. The good points have emerged with their help; the other points are my responsibility. Of particular help were the many individuals in the Massachusetts Department of Environmental Quality Engineering who contributed to the accuracy and currency of the background research; Clifford Truesdell and Rep. Peter Vellucci, as well as representatives of Speaker O'Neill's office, who helped obtain background documents and texts of the relevant state and federal statutes. Birge Albright in the Cambridge City Solicitor's Office helped provide an analysis of the Massachusetts Right to Know Act.

In the Department of Health and Hospitals, Kevin Doherty, Public Health Coordinator, spent many hours in libraries and other agencies to assure the accuracy of tables and appendices. Without the help of Dorothy Austin of the Cambridge Hospital Department of Psychiatry, the report would be far less understandable. Barbara McKinley and Vivian Smith have made sure that the text and format is readable.

The proposed Ordinance was drafted in collaboration with Chief Scott and Deputy Chief Cantwell of the Cambridge Fire Department and included reviews of similar ordinances from Braintree, Barnstable, Worcester, Boston, Dallas, TX, Santa Clara, CA, and Cincinnati, OH, as well as the Hazardous Materials Model Bylaw from the Conservation Law Foundation of New England.

There were many hours of review of the proposed Ordinance with advice and input from the Police Department, the Law Department, Mr. Teso of the Department of Traffic and Parking, Mr. Cusack of the Water Department, and representatives of local universities and businesses.

Melvin H. Chalfen, M.D.  
Commissioner  
Department of Health and Hospitals

REVIEW OF THE USE OF  
TOXIC CHEMICALS & HAZARDOUS MATERIALS  
IN CAMBRIDGE

1) The identification of potential hazards.

In order to assess the possible risks to which the city of Cambridge and its citizens may be subjected, it is essential to identify the presence of potential hazards. Presently, there are a large number of organizations in the city of Cambridge which work with varying amounts of potential hazards. To compile a thorough and adequate identification list of those many varied organizations, many of which are private companies, is a complicated and time consuming task. However, the completion of that task has been helped considerably by the November, 1983, passage of the Massachusetts "Right to Know" law, Chapter 470, Acts and Resolves of 1983. (See Appendix I). That law obligates most employers in the Commonwealth, including public employers, to adopt programs that communicate to employees and to local community residents the potential risks of toxic or hazardous workplace chemicals. The law requires labeling as well as written health risk descriptions for approximately 1,300 chemical substances, worker training programs, and a community resident petition process if a public health risk is suspected. The law also ensures employers due process and appeal rights, protects trade secrets, and exempts qualified research laboratories.

Within the city of Cambridge, in November of 1983, the Department of Health and Hospitals has determined that there are approximately 235 commercial companies and organizations whose

activities make it likely that they are using hazardous materials. In addition, staff members of the Department have conducted an historical survey to determine whether in the years 1840-1920 there were activities that may have led to the burial of materials now considered to be "hazardous wastes." Interviews with senior citizens were conducted to gain further information. Efforts in this direction do and will continue.

- 2) A review of the appropriate existing and proposed legislative and regulatory structures at the federal, state and city levels with particular reference to the monitoring of air, water, and the use, transportation and disposal of hazardous wastes.

Numerous existing and proposed legislative and regulatory structures which address potential hazards have emerged in the past 10 years, particularly at the federal level: the Consumer Product Safety Commission, the Environmental Protection Agency, the National Highway Traffic Safety Administration, the Nuclear Regulatory Commission, and the Occupational Safety and Health Administration are all federal regulatory agencies (Table 1 and 2). Those federal acts which are of principal concern in this report are implemented at the federal level by the Environmental Protection Agency (EPA).

At the state level in Massachusetts, legislative and regulatory structures which address potential hazards are implemented by the Department of Environmental Quality Engineering (DEQE). (Table 3).

#### Air quality

In the city of Cambridge, air quality is monitored by DEQE. Companies that burn materials are required to be licensed by

DEQE. Such companies must comply with established guidelines and meet regulations which define and limit the types of material that may be released into the air.

#### Water quality

Water quality is monitored both by DEQE and by the Cambridge Water Board. In addition, independent testing firms are used periodically for further monitoring purposes.

#### Hazardous materials

Environmental regulation of hazardous waste began with attention to the problem through the "Resource Conservation and Recovery Act of 1976" (RCRA) implemented through EPA at the federal level and DEQE at the state level. On March 24, 1983, the Governor signed into law the new Massachusetts "Superfund" Legislation. The primary target of Superfund is cleanup of chemical releases. The legislation imposes the expense of cleanup on "responsible parties," who are determined based on a strict liability standard. Where no such responsible parties are identifiable or solvent, Superfund creates a fund from which the state cleanup costs can be paid. Superfund is more than a cleanup law: an important objective of Superfund is the prevention of release of oil and hazardous material. In Massachusetts, Superfund, together with the state's Hazardous Waste Management Act (Chapter 21C) and the Facility Siting Act (Chapter 21D), provide a trilogy of laws which assures that nearly all aspects of commercial transportation, disposal and cleanup of hazardous materials and waste are subject to government scrutiny and control. All three laws are implemented through

DEQE. Liaison to municipalities is through local hazardous waste coordinators who are appointed by chief municipal officers.

The most recent state initiative is the previously mentioned Right to Know law, which provides workers with adequate information as to the health hazards of materials with which they work. That act also provides the right for municipalities and community residents to obtain the aforementioned information through a municipal coordinator and DEQE. The right to information for community residents is limited to those situations in which a community resident can establish that the use of a particular material in the employer's workplace endangers public health and safety. The community petition process begins with a petition to the municipal coordinator requesting an investigation. Such petitions request information about a chemical as described in a Material Safety Data Sheet (MSDS).

#### Transportation of hazardous wastes

The Department of Transportation regulates guidelines and procedures which govern the transportation of hazardous materials in motor vehicles and airplanes. Specifically, methods of packaging and containment are given careful attention. In Massachusetts, the State Police Commercial Motor Vehicle Unit enforces current federal and state regulation of hazardous materials. Federal agencies working in conjunction with the Massachusetts State Police, include the Federal Highway Administration, the Bureau of Motor Carrier Safety, the Interstate Commerce Commission and the National Highway Traffic Safety Administration.

In 1984, a new Massachusetts Act is to be filed which calls for additional personnel, an increase in the number and types of

public roadways on which the State Police are authorized to carry out enforcement, and the addition of training programs provided by the Massachusetts Firefighting Academy in order to train firefighters in the handling of hazardous materials including the management of fires involving hazardous materials.

Police officers may stop any vehicle to ascertain compliance with laws and regulations. A municipality may have its own ordinance regulating the transport of hazardous materials.

Carrier vehicles which transport substances such as gasoline are inspected regularly for safety and compliance with regulations by the Fire Department of the city in which the vehicles are garaged.

#### Hazardous materials in the workplace

The presence of hazardous materials in the workplace and their possible effects on worker's health have been addressed in the Occupational Safety and Health Act of 1970. The Occupational Safety and Health Administration (OSHA), which is part of the U.S. Department of Labor, maintains its own personnel in Massachusetts as a regulatory agency. The state Department of Labor and Industries (DLI), Division of Occupational Hygiene, is state funded and continues to operate with right of entry and investigation of complaints. In addition, DLI works in a capacity with employers requesting help with industrial hygiene.

As regulations and standards from OSHA have evolved over the years, there have been delays of implementation due to litigation. The most recent OSHA regulation is called the Hazard Communication Standard which requires that certain in-plant containers be labelled, that workers be informed of hazards within

their work areas; that MSDSs be made available to employees and that workers be trained to protect themselves when dealing with specific hazardous chemicals. These actions are to be ready by May, 1986. In its development, OSHA has tended to move from inspections to health and safety programs.

- 3) A review which determines whether the resources allocated at the federal and state levels are sufficient to carry out the goal of the legislation given the level of present funding by federal and state appropriations.

Are the resources sufficient to carry out the goals of legislation?

In September, 1982, "A Study of the Effects of Reagan Administration Policies on the Massachusetts Environment" submitted by Councillor Francis H. Duehay, Nancy Anderson, Dorothy LeMessurier, Leslie Kirwan and others, has pointed out decreased federal support in four major areas of environmental concern: Air Quality, Water Quality, Hazardous Wastes, and Parks and Recreation (See Appendix II).

The recent budget submission of Massachusetts DEQE (FY'85) also points out the decreasing federal support of EPA for the above mentioned programs. For example, 234 federally funded positions in FY'81 decrease to a projected 120 positions by the end of FY'85 (See attached charts of the changes in federal and state support in dollars and in personnel, Tables 4 and 5). The state, however, has increased its personnel from 308 in FY'81 to 394 in FY'84 and is requesting 538 in FY'85. From 1978 to 1983, DEQE has had 37 new programs mandated, requested 146 state positions and has had 55 positions filled. Programs for Air Quality, Water Quality, and Hazardous Wastes are all effected at the

state level.

In the DEQE, the Air Quality Control Division has programs for monitoring air, (smoke) source inspection and routine programs dealing with sulfur fuel and particulate control. These programs have been slowed and thinned as a result of resources and personnel being re-directed to the investigation and management of suddenly occurring events involving toxic materials, to the investigation of public concerns with specific toxic materials, and to additional unbudgeted items.

The Air Quality Programs require notification to the state of those cases wherein generators may be releasing pollutants from sources that include incinerators and traces of radioactive materials. Inspections of large generators are done yearly, while small generators are inspected every three years.

In the past, two air monitoring stations were maintained in Cambridge. There have been no monitoring stations in Cambridge for three years.

Copies of violations of regulations are sent to municipal Health and Fire Departments. There have been no violations in Cambridge for the past four years.

The DEQE Division of Water Pollution Control monitors water quality by the regular testing of water as does the Cambridge Water Board. In addition, the Water Board has certain tests performed by independent testing laboratories. Both bacteriological and chemical testing is done, the latter including inorganic chemicals such as sodium, and organic compounds such as trihalomethanes. DEQE reports to the municipalities but such reports are sometimes delayed due to DEQE's attention to areas

of higher priority and greater hazard.

Legislation affecting the use, storage and disposal of hazardous materials has increased and evolved over the past 14 years. For example, the early efforts of OSHA concentrated on bringing conditions within the workplace into compliance with specific safety standards usually of a mechanical type such as safe electrical wiring, safety guards, fire hazard protection, water and explosive material standards, and the safe siting of machinery and walkways. At the same time, and continuing, were the identification of materials and chemicals which are of an acute and chronic hazardous nature with subsequent consequences for the health and well-being of employers, employees, and community residents. Currently, legislation is aimed at identifying and labelling hazardous materials within the workplace. (See attached lists of potentially hazardous materials, including carcinogens, mutagens, and neurotoxins, substances requiring special care, containment and training to ensure proper and safe use, Table 6)

The degree of compliance with these regulations is dependent upon the attitudes and resources of employers and their commitment to more than the minimum of health and safety regulations, the inspection capabilities of state and federal agencies, and the informed participation of employees, labor unions, and the general public. Questions of adequate standardization and the interpretation of those standards are frequently challenged. A time-conserving system of judicial review is required which minimizes the expenditure of resources and the prolonged risk of exposure in the workplace as decisions are being determined.

The availability of information on substances actually used in a workplace continues to be a key issue for health and safety. Information about trade secrets, for example, is an important and legitimate issue to be taken into account as well as costs necessary to comply with the various regulations. The Massachusetts Right to Know Act regulations are to be promulgated in the near future. State agencies involved include: DPH, DOL, DEQE, and DLI. The Department of Labor and Industries, Division of Industrial Hygiene, will be responsible for "industrial safety aspects," especially in regard to violations. It is expected that DLI will employ 9-14 additional staff people. DEQE will be the repository of information in their computer systems and will expect to increase their staff by 14 people. DPH will compile the Massachusetts Substance List, keep it current and make sure that information on toxic materials is kept current. As noted in section 2, these substance lists are not automatically supplied to the city, but must be requested by the municipal coordinator.

The disposal and transport of hazardous materials are addressed and regulated by the hazardous waste division of DEQE under the Resource Conservation and Recovery Act (RCRA). RCRA regulates a "cradle to grave" operation for the transport and disposal of hazardous wastes by identifying classes of hazardous wastes, requiring a licensing of the users, transporters and disposers of such materials, and by creating a manifest system which includes a paper trail of the steps involved in the process. (See DEQE Hazardous Waste Manifest Trucking System, Appendix III)

RCRA also specifies methods of transportation containment, packaging, and labelling as set down by the U.S. Department of Transportation regulation. The RCRA hazardous waste division of DEQE, which also includes the new Massachusetts Superfund responsibility, has 40 new positions authorized this year and has requested more in the FY'85 budget.

- 4) A review which determines whether there are questions pertaining to the safe management of hazardous materials in Cambridge which are not addressed by federal and state regulations, and whether there are necessary health and safety measures insufficiently funded by current budgets: What does Cambridge need?

Table 7 shows the federal and state organizations which have evolved for regional control over environmental health risks in contrast to organizations at the municipal level.

#### Air Quality

As noted previously, smoke generated by Cambridge industry is regulated by DEQE by requiring licensure of generators and through inspection of generator facilities on a regular basis: yearly inspection for large generators and three year inspections for small generators. Reports of violations are sent to the city. There have been no reports of violations for 4 years. DEQE will also investigate any concern that a citizen may have about smoke being generated from a specific source.

The lack of air monitors for pollutants such as carbon monoxide, nitrogen dioxide, ozone, and particulate matter in areas of construction and high traffic density, such as Harvard Square, is of some concern. DEQE considers Cambridge to be part of the greater Boston area. Due to the patterns of air flow,

DEQE is satisfied that those monitors in the Greater Boston provide sufficient information of Cambridge air. The question is whether with more DEQE personnel and resources air monitors would be established in Cambridge. At the moment, no such monitors are planned for the immediate future.

It is recommended that the Public Health Subcommittee of the Cambridge Health Policy Board review DEQE's assessment that Cambridge air is sufficiently monitored.

#### Water Quality

Sodium levels in Cambridge water -- while they have decreased over the past 4 years -- continue to remain higher than federal standards. Efforts to decrease the sodium from road salting along Route 128 have been slowed by disagreements with the State. The Cambridge Water Department and the Massachusetts Department of Public Works are sponsoring a joint study this year to study the issue. In addition, alternative methods of water pollution control which may substitute calcium compounds for sodium compounds, thus lowering the sodium level in Cambridge drinking water, are being planned. Ozonation should be considered.

The State monitors trihalomethanes, compounds which may be carcinogenic. Cambridge water had been found to be consistently safe in tests conducted yearly. However, during the summer months of 1983, leafy materials collected in the filtration process and led to a transient increase of the chloroform level in the drinking water. To decrease the summer stress on the filtration process, more efficient filtering equipment is being added in Cambridge.

It has been recommended by the State that the Payson Park

Reservoir, which is an integral part of the Cambridge water system, be covered in order to prevent various contaminants from entering the water system. Plans to implement this costly measure are being considered.

Hazardous materials: Communication and Control

Of principal concern to the city of Cambridge is the lack of adequate knowledge of potentially hazardous material used, stored, or transported through the city. This lack of information in regard to use and storage may be remedied by obtaining from employers part of the information they are required to send to the state under the Massachusetts Right to Know Law. This information identifies employers who are using materials on the Massachusetts Substance List (some 1,300 materials) as well as the toxic properties of those materials. These lists also identify special hazards such as neurotoxins.

Finally, there is the matter of transporting hazardous wastes. When hazardous wastes are moved, it is done by means of licensed disposal contractors who use appropriate equipment which is inspected regularly. The lack of the RCRA manifest system for tracking hazardous wastes is that it is a retrospective system which identifies where hazardous wastes have been, who has transported them and where they have gone. The system does provide regulations to avoid abuse in transportation and disposal. However, we need more information. The information list of hazardous wastes generators provided to a city may only be on a six month basis. An information system which provides more up-to-date communication and notification between the state and its municipalities would be helpful.

I am recommending that the Department of Traffic and Parking study the control of truck routes: times of entry and passage are of particular concern. In addition, under the Right to Know Act, further studies would strengthen our knowledge of where hazardous materials are being carried and stored within the city. It should be determined whether certain trucks carrying especially hazardous materials should be banned from specifically designated, densely populated areas, or whether there should be limited times when entry and passage are permitted.

Twice in the past seven years, the city of Cambridge has not been satisfied that the use of certain materials was safe within the city. The first instance involved the use of recombinant DNA materials, a new technology in which there was little experience and in which regulations were established according to voluntary guidelines. The second instance is a research project at Arthur D. Little Co. which involves materials of a highly toxic nature. In this latter case, some regulations exist and have been met, nonetheless, there remains a concern about safety in the areas surrounding that site. Similar situations may occur in the future. In order to develop a process in which city officials have the opportunity to assess work being done with highly toxic substances which may result in a call for public review, information on such work should be known to the city in time to conduct such a process. Toxic chemicals exist in the thousands and more will be developed as time goes on. The Massachusetts Substance List is essential as is a computer retrieval system which ensures that collected

data can be utilized. Substances of special concern to the city may be further categorized in a short list and subjected to special review. It is further recommended that channels of communication be strengthened among members of city departments whose task it is to ensure compliance with safety regulations and licensing.

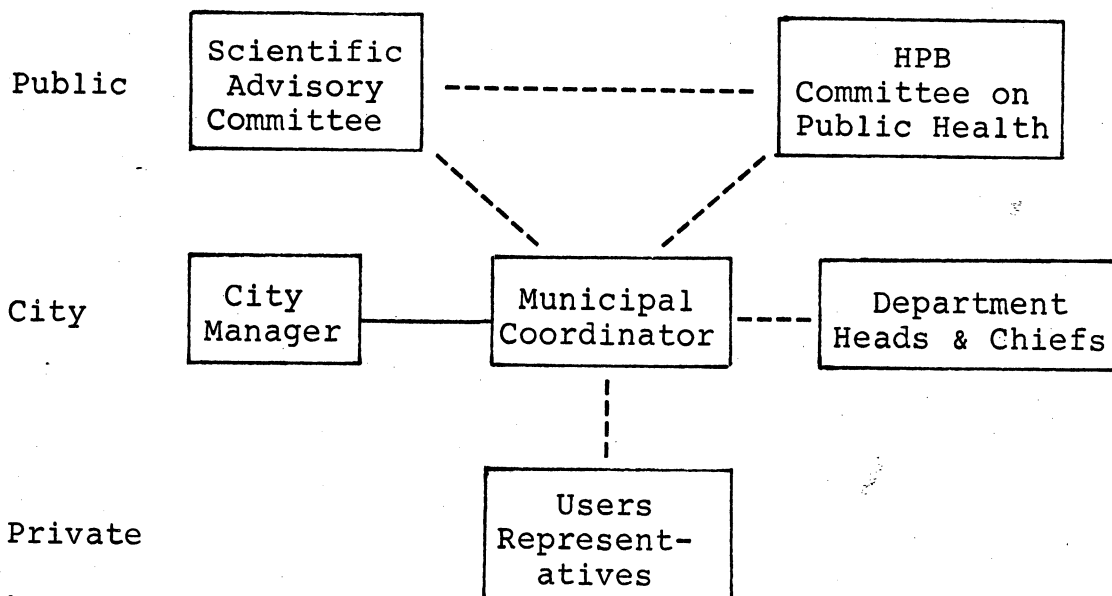
I am recommending that the Municipal Coordinator meet regularly with the heads and chiefs of municipal departments, that the Municipal Coordinator meet regularly with a group of representatives of Users of Hazardous Materials and that all relevant information provided by those groups be reviewed by the already existing Public Health Subcommittee of the Health Policy Board. The Subcommittee is a group of Cambridge residents with particular interest in public health, who have been appointed by the City Manager.

In this way the intent is to improve communications and to foster the essential spirit of cooperation which must exist between the private sector, the public and the city government. This cooperation can lead to more information and education about toxic substances, can implement a process of advance consideration of the use of materials of concern, and allow for the continuous flow of information and action necessary for the management of constantly changing inventories of toxic materials in the city.

These recommendations should, in my opinion, be seen as the first steps to take and not as final actions. It would be expected that as experience grows in this area of community orientation, of public and private interaction in the uses of

toxic chemicals other means of control and communication of benefit to all groups concerned will emerge.

PROPOSED CAMBRIDGE HEALTH AND SAFETY STRUCTURE  
FOR TOXIC AND HAZARDOUS MATERIALS:  
the public, private and city relationships



## Regulation and Control of Occupational Health Problems

## MAJOR HEALTH AND SAFETY STATUTES ADMINISTERED BY FEDERAL REGULATORY AGENCIES

**Consumer Product Safety Commission**

Consumer Product Safety Act, 1972 as amended  
 Federal Hazardous Substances Act of 1960 as amended  
 Flammable Fabrics Act, 1953; as amended  
 Poison Prevention Packaging Act, 1970  
 Refrigerator Safety Act, 1956

**Environmental Protection Agency**

Clean Air Act of 1970 as amended  
 Federal Insecticide, Fungicide and Rodenticide Act of 1948 as amended  
 Marine Protection, Research and Sanctuaries Act, 1972  
 Noise Control Act, 1972  
 Resource Conservation and Recovery Act of 1976 as amended  
 Safe Drinking Water Act of 1974 as amended  
 Toxic Substances Control Act, 1976  
 Clean Water Act of 1977  
 National Environmental Policy Act of 1969 as amended  
 Solid Waste Disposal Act of 1974 as amended

**Federal Aviation Administration**

Federal Aviation Act of 1958 as amended

**Food and Drug Administration**

Federal Caustic Poison Act, 1927 as amended  
 Fair Packaging and Labeling Act of 1966 as amended  
 Federal Food, Drug, and Cosmetic Act of 1938 as amended  
 Federal Import Milk Act  
 Public Health Service Act of 1944 (certain sections) as amended  
 Comprehensive Drug Abuse Prevention and Control Act of 1970 (certain sections) as amended  
 Radiation Control for Health and Safety Act, 1968  
 Tea Importation Act, 1897

**Food Safety and Quality Service**

Agriculture Marketing Act of 1946 as amended  
 Egg Products Inspection Act  
 Federal Meat Inspection Act of 1907 as amended  
 Poultry Products Inspection Act of 1957 as amended

**National Highway Traffic Safety Administration**

Highway Safety Act of 1966 as amended  
 National Traffic and Motor Vehicle Safety Act of 1966 as amended

**Nuclear Regulatory Commission**

Atomic Energy Act, 1954; as amended  
 Energy Reorganization Act, 1974 as amended

**Occupational Safety and Health Administration**

Occupational Safety and Health Act of 1970 as amended

## MAJOR HEALTH AND SAFETY REGULATORY AGENCIES

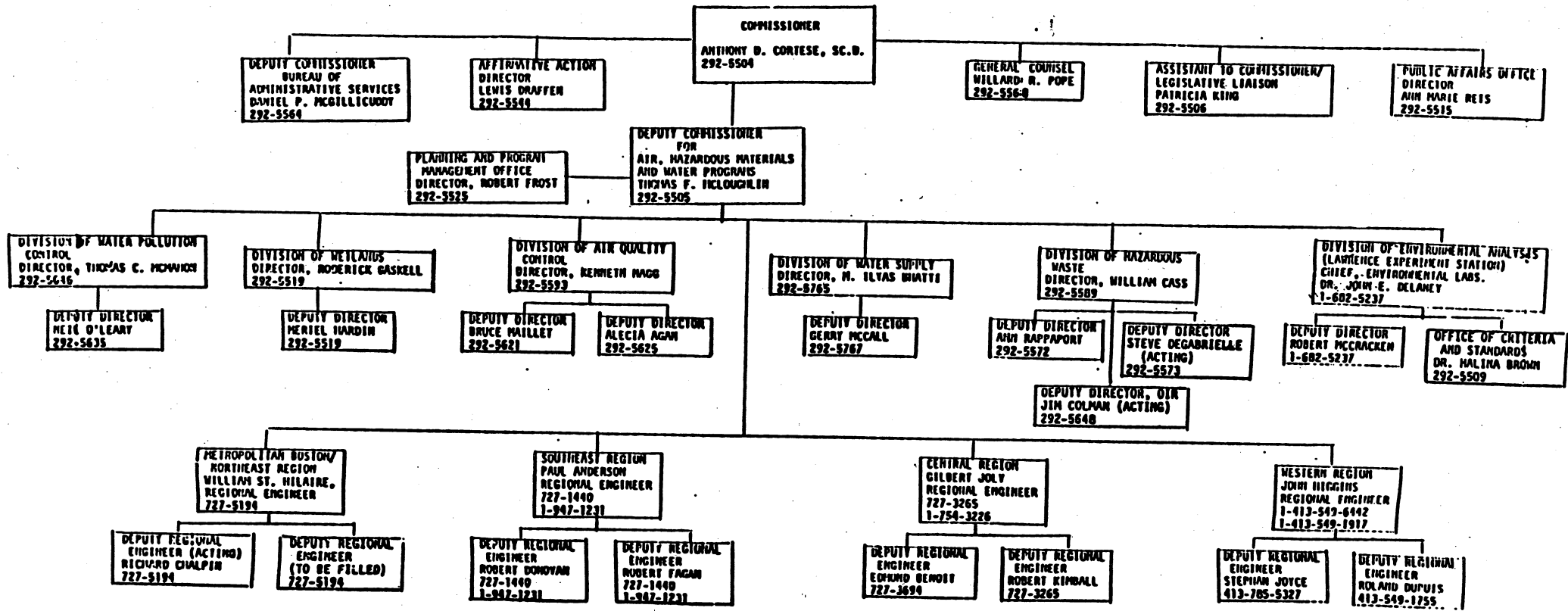
Agency	Year Created*	Created by	** 1980 Actual	** 1982 Actual	** 1983 Actual	1984** (estimated)	1985** (estimated)
CPSC	1973	Consumer Product Safety Act	44.2 million	33.6 million	32.8 million	35.7 million	35 million
EPA	1970	Presidential Order	5.6 billion	5.08 billion	4.31 billion	4 billion	4.2 billion
FAA	1958	Federal Aviation Act	1.9 billion	1.38 billion	1.61 billion	2.4 billion	955 million
FDA	1907	Federal Food & Drugs Act	325.7 million	343.5 million	363.6 million	395.7 million	404 million
NHTSA	1966	Highway Safety Act	62 million	45.5 million	58.3 million	57.3 million	59 million
NRC	1974	Energy Reorganization Act	337.9 million	441.9 million	514.6 million	450 million	464 million
OSHA	1970	Occupational Safety and Health Act	178.2 million	194 million	200.2 million	215.4 million	217 million

\* Prior to creation of these agencies, some of their functions were carried out by various departments of the federal government.

\*\* Dollar amounts rounded.

TABLE 3

DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING



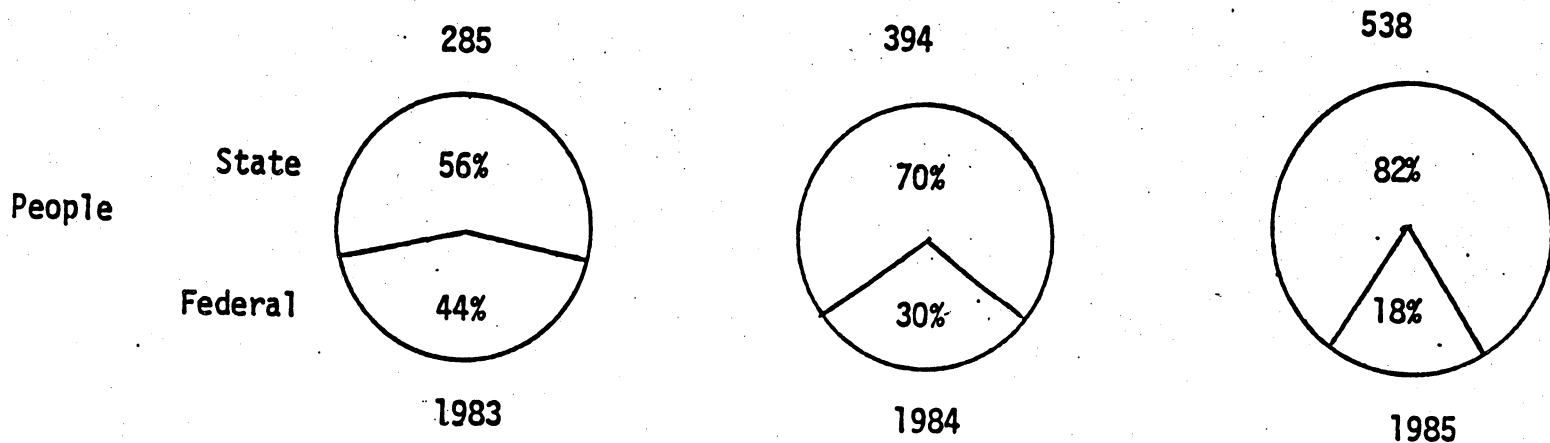
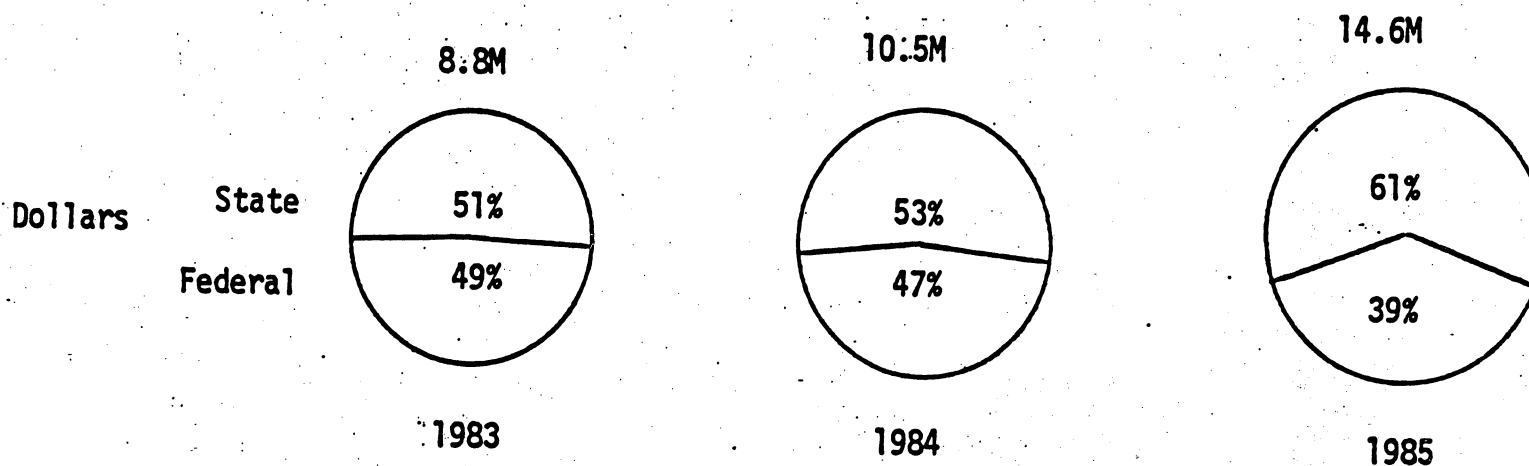
Effective: November 1983

DEQE STATE-FEDERAL LEVELS OF EFFORT  
1980-1985

	STATE *		FED. *		TOTAL *
1980	356	\$7.1M	197	\$8.9 M	553 \$16.0M
1981	308	7.7M	234	7.4M	542 15.1M
1982	320	8.3 M	202	8.3M	522 16.6M
1983	285	8.8M	224	8.6M	509 17.4M
1984	394	10.5M	167	9.5M	561 20.0M
1985	538	14.6M	120	9.5M	658 24.1

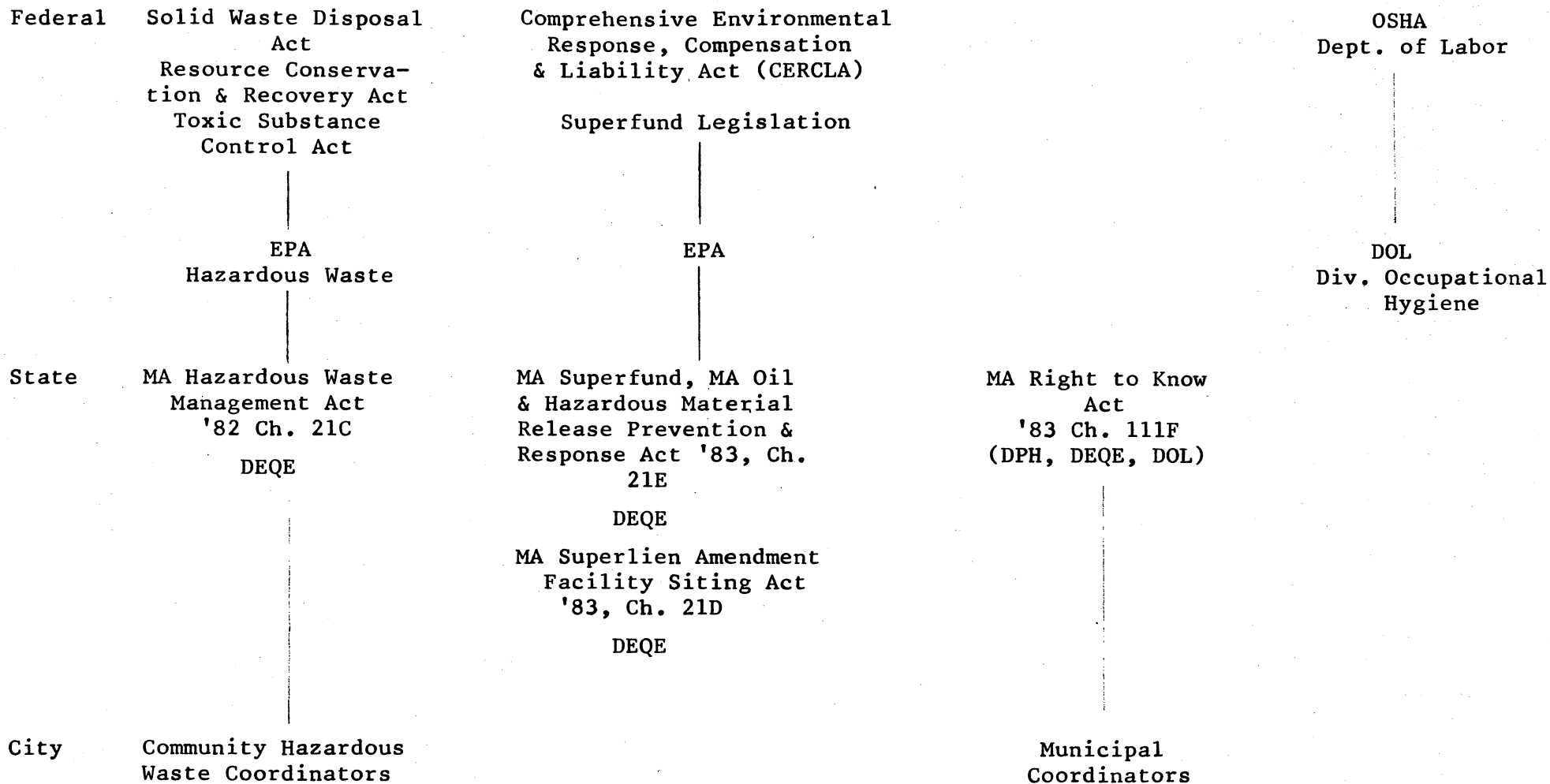
\*Personnel

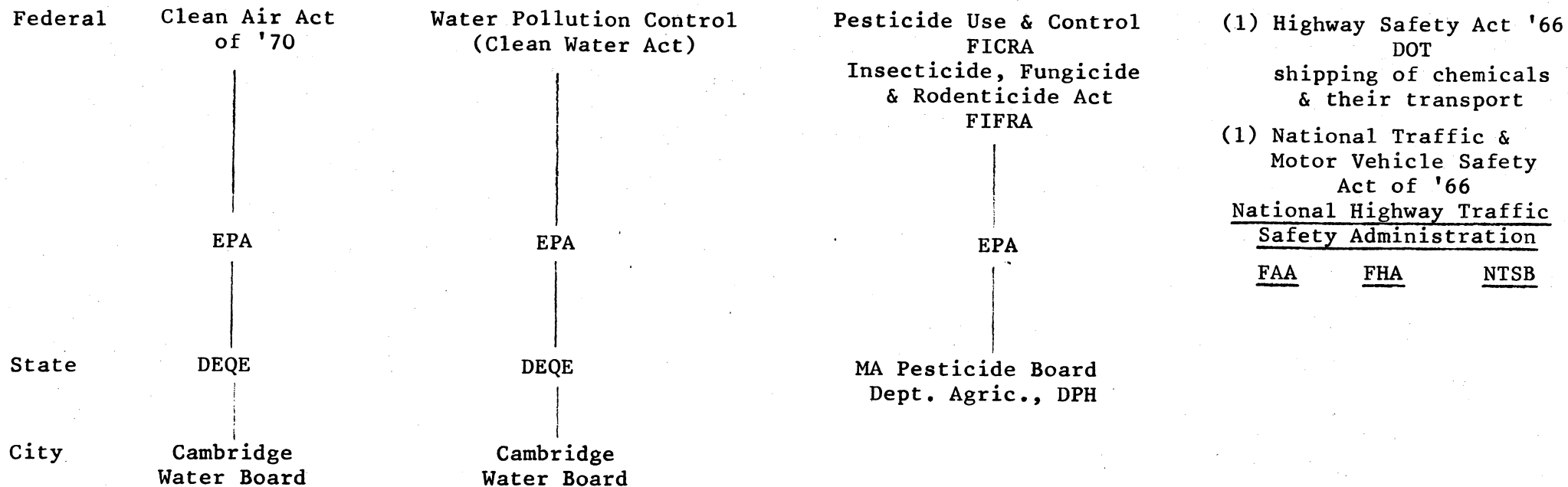
STATE-FEDERAL TREND ON LEVEL OF EFFORT



## CHEMICALS LISTS

1. Environmental Protection Agency  
Restricted Use Pesticides - 40 CFR 162.30
2. International Agency for Research on Cancer  
(Sublist: "Substances found to have at least  
sufficient evidence of carcinogenicity in animals")
3. National Toxicology Program  
List of chemicals published in the Annual Report on  
Carcinogens
4. Occupational Safety and Health Administration  
Toxic and Hazardous Substances - 29 CFR 1910, Subpart Z
5. National Institute for Occupational Safety and  
Health/Occupational Safety and Health Administration  
Occupational Health Guidelines for Chemical Hazards
6. American Conference of Governmental Industrial  
Hygienists  
Threshold Limit Value for Chemical Substances and  
Physical Agents in the Workplace
7. National Fire Protection Association  
Hazardous Chemicals Data (NFPA 49)
8. National Fire Protection Association  
Fire Hazard Properties of Flammable Liquids, Gases,  
Volatile Solids (NFPA 325M)  
(All items rated II through IV as health hazards or  
III through IV as flammability or reactivity hazards.)
9. Environmental Protection Agency  
Carcinogen Assessment Group's List of Carcinogens
10. National Cancer Institute  
(Substances that meet the NTP criteria for significant  
carcinogenic effect.)





NOV 14 1983

THE COMMONWEALTH OF MASSACHUSETTS  
 ADVANCE COPY                      1983                      ACTS AND RESOLVES  
 MICHAEL JOSEPH CONNOLLY, SECRETARY OF STATE

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**Chap. 470.            AN ACT FURTHER REGULATING THE PROTECTION OF THE PUBLIC HEALTH.**

Be it enacted, etc., as follows:

**SECTION 1.** The General Laws are hereby amended by inserting after chapter 111E the following chapter:-

**CHAPTER 111F.**

**Section 1.** In this chapter, the following words shall have the following meanings:-

"Article", a finished product or manufactured item: (1) which is formed to a specific shape or design during manufacture, (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the article, except that fluids and particles are not considered articles regardless of shape or design unless inert or totally encapsulated.

"CAS number", the identification number assigned by the Chemical Abstracts Service to specific chemical substances.

"Chemical name", the scientific designation of a substance in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry or the system developed by the Chemical Abstracts Service.

"Common name", any designation or identification such as code name, code number, trade name, or brand name used to identify a substance other than by its chemical name.

"Community resident", any resident of a municipality in which an employer manufactures, processes, uses or stores toxic or hazardous substances as defined in this section.

"Container", any receptacle or formed or flexible covering for the storage or transport of toxic or hazardous substances including but not limited to a bag, barrel, bottle, box, can, carton, cylinder, drum, pipe, storage tank, both mobile and stationary, vessel or vat.

"DEQE", the department of environmental quality engineering.

"DLI", the department of labor and industries.

"DPH", the department of public health.

"Designated representative", an employee's treating physician upon written authorization by said employee, and the employee's collective bargaining agent who is certified, or is recognized by the employer of the employee without regard to written employee authorization. No other individual or organization shall be eligible to serve as a designated representative.

"Employee", any person employed on or after the effective date of this chapter who is, has been, or may be exposed under normal operating conditions or foreseeable emergencies to any toxic or hazardous substance in a workplace. In the case of a deceased or legally incapacitated employee, the employee's spouse, guardian or executor may exercise all the employee's rights under this chapter. For purposes of this chapter, any person whose employment is terminated for any reason after the effective date of this chapter is an employee.

"Employer", any person, firm, corporation, partnership, association or other entity engaged in a business or in providing services, including the commonwealth and any of its political subdivisions, that manufactures, processes, uses or stores toxic or hazardous substances, but not including the employment of domestic workers or casual laborers employed at the place of residence of the employer. Independent contractors shall be deemed the sole employer of their employees, even when said employees are performing work at the workplace of another employer as defined herein.

"Expose" or "exposure", any situation arising from or related to the work operation of an employer where an employee or a community resident may ingest, inhale, absorb through the skin or eyes or otherwise come into contact with a toxic or hazardous substance.

"Impurity", a toxic or hazardous substance which is unintentionally present with another substance or mixture.

"Label", the written, printed and graphic information displayed on or affixed to the container of a toxic or hazardous substance; or the placards, signs, or operating instructions which communicate the information required by section seven herein.

"Manufacturer", a person who produces, synthesizes, extracts, or otherwise makes a toxic or hazardous substance.

"Massachusetts substance list", a compilation of toxic or hazardous substances which are to be subject to the provisions of this chapter.

✓ "Material safety data sheet" or "MSDS", the written document which sets forth the following information for a toxic or hazardous substance:

(a) The chemical name, any common names, and the CAS number of the toxic or hazardous substance.

(b) The hazards or other risks in the use of the toxic or hazardous substance, including:

(1) the potential for fire, explosion, corrosivity, and reactivity;

(2) the acute and chronic health effects of risks from exposure; including the medical conditions that might be aggravated by exposure; and

(3) the potential routes of exposure and symptoms of overexposure.

(c) The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic or hazardous substances, including appropriate emergency treatment in case of overexposure at hazardous levels.

(d) The emergency procedures for spills, fire, disposal and first aid.

(e) A description in lay terms, of the specific potential health risks posed by the toxic or hazardous substance intended to alert any person reading this information, including but not limited to carcinogenic, mutagenic, teratogenic, or neurotoxic effects, for substances so designated on the Massachusetts substance list, pursuant to section four (c) of this chapter.

(f) The month and year that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

"Medical emergency", a serious medical condition which poses an imminent threat to a person's health, caused or suspected to have been caused, by accidental exposure to a toxic or hazardous substance, and which requires immediate treatment by a physician.

"Mixture", any solution or intimate admixture of two or more substances, at least one of which is present as a toxic or hazardous substance, as designated pursuant to section four, which do not react chemically with each other.

"Municipal coordinator", the fire chief or fire commissioner, or the public health commissioner or public health officer, of a city or town as designated by the chief municipal officer of said city or town; provided that in towns which lack all of the aforesaid officials, the board of selectmen shall designate one of its members to act as municipal coordinator. For purposes of this chapter, chief municipal official shall mean in a city, the mayor; in a Plan D or Plan E government, the city or town manager; in a town, the board of selectmen.

"NFPA Code", the color and number system identifying the category and degree of fire hazard of a substance as adopted by the National Fire Protection Association in "Standard System For the Identification of Fire Hazards of Materials", NFPA 704 in effect on the effective date of this chapter, and as amended from time to time thereafter.

"Research laboratory", a workplace or a work area of a workplace used primarily for research, development, nonroutine testing or experimentation activity in which toxic or hazardous substances are used by or under the direct supervision of a technically qualified individual. Provided, however, that a research laboratory shall not be involved in the production or manufacture of goods for direct commercial sale.

"Technically qualified individual", a person who, because of education, training, or experience, understands the health risk associated with the toxic or hazardous substance or mixture handled by or under his or her supervision, and is familiar with the personal protective procedures to be followed in the use or handling of such substances.

"Trade secret", any formula, pattern, device, or compilation of information which is used in an employer's or manufacturer's business, and which gives said employer or manufacturer an opportunity to obtain an advantage over competitors who do not know or use it.

"Toxic or hazardous substance", any chemical substance or mixture of substances in a gaseous, liquid or solid state which is listed in the Massachusetts substance list compiled in compliance with the provisions of section four, and which is manufactured, processed, used or stored in the workplace, but which shall not include alcoholic beverages as defined in section one of chapter one hundred and thirty-eight of the General Laws, or articles intended for personal consumption by employees in the workplace, or consumer articles packaged for distribution to, and used by, the general public, or articles sold or used in retail food establishments and all other retail trade establishments, exclusive of articles used in processing and repair areas, or substances being transported in interstate commerce.

"Work area", a room or defined space in a workplace where toxic or hazardous substances are produced, used and where employees are present in the course of their employment.

"Workplace", an establishment or business of an employer at one geographic location at which work is performed and containing one or more work areas, but not including a police station or public armory in which ammunition is stored. In the case of the commonwealth or any of its political subdivisions acting as an employer, the workplace shall be defined as all work areas wholly owned or controlled by the commonwealth or said subdivisions; in the case of an independent contractor, the workplace shall be defined as all work areas wholly owned or controlled by said independent contractor; provided however, that employees of the commonwealth, or any of its political subdivisions, or an independent contractor shall have certain rights to examine MSDS's as provided in section eleven (f).

Section 2. The responsibility for administering the provisions of this chapter, and for assuring an appropriate state response to alleged violations thereof, shall be assigned in the following manner:

(a) The commissioner of DPH shall be responsible for the administration of sections four through six, twelve and twenty, which relate to the establishment and amendment of the Massachusetts substance list, the dissemination of information pertaining to toxic or hazardous substances, the granting of certain waivers or alternative conditions to the disclosure requirements contained in this chapter, and trade secrets.

(b) The commissioner of DLI shall be responsible for the administration of sections seven through eleven, and thirteen through fifteen, which define the rights and duties of employees and employers under this chapter.

(c) The commissioner of DEQE, on behalf of the commonwealth, and the municipal coordinator of each city or town, on its behalf, shall be responsible for the administration of sections sixteen through nineteen, which relate to requests by state officials, municipal officials, and community residents for actions and information available under this chapter.

The commissioners of the DPH, DLI, and DEQE shall have the authority to promulgate rules and regulations necessary to carry out their respective responsibilities under this chapter. In

order to avoid the promulgation of conflicting rules and regulations, the commissioners shall take such steps as are necessary to assure that proposed rules and regulations are consistent with the rules and regulations of the other departments with responsibilities under this chapter in conformance with the statutory responsibilities set forth herein. Said rules and regulations shall be promulgated in accordance with chapter thirty A, no later than one hundred and eighty days after the date of enactment of this chapter.

Section 3. (a) If any of the commissioners with responsibilities under this chapter have cause to believe that an employer or manufacturer has wrongfully failed to comply with any provision of this chapter for which that commissioner has been delegated responsibility, that commissioner may, within one hundred and twenty days of the alleged violation or within one hundred and twenty days from the date on which the commissioner obtained knowledge of the violation, undertake an investigation.

The commissioner shall immediately notify the employer or manufacturer by certified mail, return receipt requested, that an investigation will be undertaken and shall also include in the notice a statement detailing the nature of the alleged violation and when it was alleged to have occurred. The employer or manufacturer may respond to the notice of the commissioner, but must do so within twenty days. The commissioner shall consider all matters in mitigation or extenuation of the alleged violation during the course of the investigation. If such commissioner shall determine after such investigation that good cause does not exist to believe that a wrongful violation of the provisions of this chapter has occurred, he or she shall within ten days notify the employer or manufacturer of such finding.

If such commissioner shall determine after such investigation that good cause does exist to believe that a wrongful violation of the provisions of this chapter has occurred, he shall immediately notify the employer or manufacturer of such finding, and shall immediately endeavor to eliminate the alleged violation by conference, conciliation, and persuasion. In case of failure so to eliminate the alleged wrongful violation by conference, conciliation, and persuasion, the commissioner may order such remedial action as may be appropriate including the issuance of a cease or desist order to any recurrence. The commissioner may also request the attorney general to enforce any order issued or any fine or penalty authorized by this section in the appropriate court of the commonwealth. In such enforcement action the court shall have jurisdiction to restrain violations and to levy penalties as provided herein.

Any employer or manufacturer aggrieved by an order of any commissioner pursuant to this section may obtain judicial review thereof in the Superior court for the county in which the alleged violation of this chapter which is the subject of the commissioner's order occurred. The order of the commissioner shall be reviewed in accordance with the standards for review provided in section fourteen of chapter thirty A.

Any employer or manufacturer who wrongfully fails to comply

with or otherwise violates the provisions of this chapter shall be liable for a civil penalty not to exceed two hundred and fifty dollars for each day that each such violation continues.

(b) If any of the commissioners with responsibilities under this chapter have cause to believe that an employer or manufacturer has willfully and intentionally violated any provisions for which that commissioner has been delegated responsibility, that commissioner may report such alleged violation to the attorney general and may request that the attorney general bring an action in the appropriate court of the commonwealth to restrain such violations and to seek such penalties as are provided herein.

Any person who willfully and intentionally violates the provisions of this chapter shall be guilty of a misdemeanor and shall be punished, for a first offense, by a fine of not more than five hundred dollars for each day that such violation continues, or by imprisonment for not more than thirty days or both; for a subsequent offense, by a fine of not more than one thousand dollars for each day that such violation continues, or by imprisonment for no more than ninety days, or by both such fine and imprisonment.

(c) This chapter shall not be construed to create any independent private right of action, and the responsibility for enforcement of this chapter shall lie exclusively with the attorney general.

(d) This chapter shall not be construed to enlarge or diminish any rights or privileges created by collective bargaining agreements or any other provisions of law.

Section 4. (a) For the purposes of this chapter, the commissioner of DPH shall establish the Massachusetts substance list and make said list available to manufacturers, employers, municipal coordinators, and the commissioners of DLI and DEQE. Substances on the list may be designated by their chemical name or common name(s), and CAS number. Only those substances specifically enumerated on the list shall be subject to the provisions of this chapter, and no articles as defined in section one shall be included on the list. The commissioner of DPH shall prepare and amend the list according to the following procedures, and shall promulgate said list pursuant to the rulemaking provisions of chapter thirty A on an annual basis. The annual list shall become effective ninety days after its promulgation. In the case of substances which are extraordinarily hazardous and a threat to public health, the commissioner of DPH may promulgate emergency amendments to the list according to the laws of the commonwealth, provided that appropriate procedures for amending the list, as specified in this section, are followed.

(b) The list shall consist initially of all chemical substances enumerated in any of the following designated source lists, exclusive of generic categories:

1. Environmental Protection Agency  
Restricted Use Pesticides - 40 CFR 162.30
2. International Agency for Research on Cancer  
(Sublist: "Substances found to have at least sufficient evidence of carcinogenicity in animals")

3. National Toxicology Program  
List of chemicals published in the Annual Report on Carcinogens
4. Occupational Safety and Health Administration  
Toxic and Hazardous Substances - 29 CFR 1910, Subpart Z
5. National Institute for Occupational Safety and Health/Occupational Safety and Health Administration  
Occupational Health Guidelines for Chemical Hazards
6. American Conference of Governmental Industrial Hygienists  
Threshold Limit Value for Chemical Substances and Physical Agents in the Workplace
7. National Fire Protection Association  
Hazardous Chemicals Data (NFPA 49)
8. National Fire Protection Association  
Fire Hazard Properties of Flammable Liquids, Gases, Volatile Solids (NFPA 325 M)  
(All items rated II through IV as health hazards or III through IV as flammability or reactivity hazards.)
9. Environmental Protection Agency  
Carcinogen Assessment Group's List of Carcinogens
10. National Cancer Institute  
(Substances that meet the NTP criteria for significant carcinogenic effect.)

(c) The commissioner, in promulgating the Massachusetts substance list and its amendments shall designate on said list any substance which is a carcinogen, mutagen, teratogen, or neurotoxin, based on a preponderance of substantial and valid scientific evidence.

(d) For the purposes of this chapter, a toxic or hazardous substance is present in any mixture if it is one per cent or more of the mixture or two per cent if the toxic or hazardous substance exists as an impurity in the mixture; provided, however, that the commissioner of DPH may, by regulation, raise the concentration requirement for a toxic or hazardous substance which he or she finds is not toxic or hazardous at the threshold levels; and may lower the concentration requirement for a toxic or hazardous substance including carcinogens, mutagens, teratogens, and neurotoxins for which there is valid and substantial scientific evidence that the substance is extraordinarily hazardous.

The manufacturer of a toxic or hazardous substance shall notify the commissioner of DPH of any valid evidence which indicates either: that the concentration requirement for a toxic or hazardous substance is higher than what is necessary to protect employees who work with, or may be exposed to, the substance; or that the concentration levels should be lowered because there is valid and substantial evidence that the substance is extraordinarily hazardous.

The provisions of this chapter shall not apply to impurities which develop as intermediate materials during chemical processing but are not present in the final mixture, and to which employee or community resident exposure is unlikely.

(e) The commissioner of DPH shall amend the Massachusetts Substance List by adding, in place of the generic categories excluded pursuant to subsection (b) of this section, those specific toxic or hazardous substances which fall within said generic categories and which, in his judgment, should be subjected to the provisions of this act. Provided that such amendment shall be made only after opportunity has been provided for public comment and hearing pursuant to the rulemaking provisions of chapter thirty A and upon the commissioner's finding that according to the preponderance of the evidence, substantial and valid scientific evidence exists that any substances added pursuant to this subsection may result in an acute or chronic risk to human health or safety.

(f) Any substance added to or deleted from the source lists designated in subsection (b) of this section by the agency responsible for preparing and amending said list shall be added to, or deleted from, the Massachusetts substance list as part of its annual amendment by the commissioner of DPH.

(g) Further amendments to the Massachusetts substance list may be established by the commissioner of DPH, pursuant to the following process:

The commissioner shall publish a notice of intent to add a substance to the Massachusetts substance list. This notice shall identify the proposed substance and shall inform interested persons of their right to request a proceeding pursuant to this section. Any person showing that he may be substantially and specifically affected by the proposed addition to the substance list may file a request for such hearing provided that such request is filed in writing with the commissioner within thirty days of the date that the notice was published.

Upon receipt of a request for a hearing, the commissioner shall set a hearing date. Reasonable notice of the hearing shall be afforded all persons requesting a hearing and shall include statements of the time and place of the hearing. Parties shall have sufficient notice of the issues involved to afford them reasonable opportunity to prepare evidence and argument.

The commissioner shall allow any other interested person to participate by presentation of argument orally or in writing, or for any other limited purpose, as the agency may order.

Unless otherwise provided by law, the commissioner, or his hearing officer, need not observe the rules of evidence observed by courts, but shall observe the rules of privilege recognized by law. Evidence may be admitted and given probative effect only if it is the kind of evidence on which reasonable persons are accustomed to rely in the conduct of serious affairs. The commissioner may exclude unduly repetitious evidence.

Every party shall have the right to call and examine witnesses, to introduce exhibits, and to submit rebuttal evidence. Cross-examination shall not be allowed.

All evidence, including any records, investigation reports, and documents in the possession of the agency of which it desires to avail itself as evidence in making a decision, shall be offered and made a part of the record in the proceeding, and no other

factual information or evidence shall be considered. Documentary evidence may be received in evidence in the form of copies or excerpts, or by incorporation by reference.

The commissioner shall make available an official record, which shall include testimony and exhibits, and which may be in narrative form, but need not arrange to transcribe shorthand notes or sound recordings unless requested by a party. If so requested, the commissioner may, unless otherwise provided by any law, require the party to pay the reasonable costs of the transcript before the agency makes the transcript available to the party.

A decision to place a substance on the list pursuant to this subsection, must be based upon the commissioner's finding that according to the preponderance of the evidence, substantial and valid scientific evidence exists that the substance poses an acute or chronic risk to human health or safety. The commissioner's decision shall be in writing or stated in the record. The decision shall be accompanied by a statement of reasons for the decision, including determination of each issue of fact or law necessary to the decision. Parties to the proceeding shall be notified in person or by mail of the decision, of their right to appeal the decision to the Superior court and the time limits on their right to appeal. A copy of the decision and of the statement of reasons shall be delivered or mailed upon request to each party and to his attorney of record.

Any person aggrieved by the decision of the commissioner may appeal such decision to the Superior court for Suffolk county. The standards for review shall be in accordance with the standards provided in section fourteen of chapter thirty A.

(h) Substances not present on the Massachusetts substance list established pursuant to this section shall not be subject to the provisions of this chapter.

(i) The commissioner of DPH shall be responsible for the dissemination of all information available on the nature and hazards of toxic or hazardous substances, from the chemical substances information networks of the federal environmental protection agency, the health hazard evaluation program of the national institute of occupational safety and health and any and all other information sources. DPH shall promptly assist employers, employees, community residents, municipal coordinators and state personnel with inquiries concerning the toxic or hazardous nature of such substances. DPH shall assist DLI in its responsibilities with respect to preparing or obtaining MSDS information pursuant to section nine (b).

Section 5. The preparer of an MSDS may omit from the MSDS the chemical name, common name, or CAS number if the release of said information which would disclose a trade secret as defined by this chapter. The preparer shall provide all other information on the properties and effects of the hazardous substance required for the MSDS and shall indicate which category of information is being withheld on trade secret grounds. An employer may withhold from a label of a container as required by section seven the chemical name of a substance if said name is a trade secret as defined in section one.

(a) In order to make a trade secret claim pursuant to this section, a manufacturer or other preparer of an MSDS must submit to the commissioner of DPH a duplicate of the MSDS which excludes the information claimed as a trade secret, and shall also submit a complete justification and statement of the grounds on which the information is claimed to be a trade secret, at the same time he provides the MSDS to DEQE pursuant to section sixteen. Provided that said complete justification and statement of the grounds shall not be required to include the information claimed to be a trade secret.

(b) If the commissioner of DPH has cause to believe that the data withheld is not a trade secret and that good cause exists for requiring the withheld information, he or she shall notify the preparer of the MSDS by certified mail.

(c) The commissioner of DPH shall determine whether such withheld information is protected as a trade secret within fifteen days after receipt of the duplicate MSDS, justification and statement, and shall notify by certified mail the preparer of the MSDS and any party who has requested the withheld information of that determination. If the commissioner of DPH determines that the withheld information is not protected as a trade secret, the final notice shall also specify a date, not sooner than fifteen days after the date of mailing of the final notice, when the withheld information shall be made available to the commissioner of DEQE.

If the commissioner of DPH determines that the withheld information is a trade secret, he or she shall notify by certified mail the preparer of the MSDS and any party who has requested the withheld information, and immediately return to the preparer of the MSDS all information and documents submitted concerning the validity of the trade secret claim.

(d) Prior to the date specified in the final notice the preparer of the MSDS may appeal all adverse determinations in the Superior court for the county in which the employer's workplace is located or in Suffolk county. The order of the commissioner shall be reviewed in accordance with the standards for review provided in section fourteen of chapter thirty A. Filing a timely appeal under this section shall act as an automatic stay of the preparer's obligation to supply the withheld information.

(e) Any information reported to or otherwise obtained by the commissioner of DEQE or any of his representatives or employees, which is exempt or protected from disclosure under any provisions of this chapter, may be disclosed to an officer or employee of the United States, in connection with the official duties of such officer or employee under any law for the protection of health.

(f) Information certified to by appropriate officials of the United States, as necessarily kept secret for national defense purposes, shall be accorded the full protections against disclosure as specified by such official or in accordance with the laws of the United States.

Section 6. A research laboratory, as defined in section one, shall be exempt from the provisions of this chapter. In order to

qualify a work area of a workplace or a workplace as a research laboratory, an employer shall file a sworn statement with the commissioner of DPH which shall include sufficient information pertaining to the workplace or area and the personnel employed therein to enable the commissioner to determine whether the workplace or work area is qualified for the research laboratory exemption, and assurance that the employer has notified the employees of said workplace or work area that this exemption is being claimed.

If the commissioner fails to receive sufficient information to determine whether a workplace or work area qualifies as a research laboratory, or if the commissioner has reason to believe that the workplace or work area does not qualify as a research laboratory, or that the operation of the workplace or work area for which a research laboratory exemption has been claimed poses a threat to the health and safety of employees employed at that workplace or work area, he shall notify the employer in writing and offer the employer an opportunity for a hearing pursuant to chapter thirty A of the General Laws. If the employer fails to substantiate his claim that a workplace or work area is a research laboratory and that said laboratory is being operated in a manner which does not pose a threat to the health and safety of employees employed at that workplace or work area, the commissioner may issue an order revoking the research laboratory exemption in part, or in its entirety for that workplace or work area. The commissioner of DPH may establish by regulation the conditions under which a research laboratory may retain its exemption. An employer may appeal an order of revocation pursuant to the procedures of chapter thirty A.

Section 7. (a) Except as otherwise provided by this section, an employer shall label with the chemical name each container in his or her workplace containing a toxic or hazardous substance. Said label shall also contain the proper NFPA Code applicable to any contents of the container for which an NFPA Code has been published in NFPA 49, Hazardous Chemical Data, but only in those instances where the container contains more than five gallons or thirty pounds of materials to which the NFPA Code is applicable.

(b) The employer is not required to label any container of a toxic or hazardous substance weighing five pounds or less or having a volume of one gallon or less; and is not required to label any container of a toxic or hazardous substance if said substance constitutes less than one per cent of the contents of the container, or two per cent if the toxic or hazardous substance exists as an impurity in a container, subject to the provisions for revised concentration requirements specified in section four (d) of this chapter.

(c) The employer is not required to label any container if the container is currently labeled pursuant to regulations promulgated by the United States Department of Transportation, or pursuant to the Federal Insecticide, Fungicide and Rodenticide Act (61 Stat. 163, 7 U.S.C. Sec. 121 et seq.); the Atomic Energy Act; or the Food, Drug and Cosmetics Act. The commissioner of DPH

may by regulation certify containers labeled pursuant to any other federal act as labeled in compliance with this chapter.

(d) The employer is not required to label any container of ten gallons or less in volume into which a toxic or hazardous substance or mixture is transferred by an employee from labeled containers and which is intended only for the immediate use of the employee who performed the transfer.

(e) In cases where a pipe or piping system, a fixed storage tank, or a reaction vessel is used, on a regular basis, for different toxic or hazardous substances at different times, an employer may choose to convey the information required by this section by posting signs, placards, or operating instructions, rather than affixing labels. Provided that for any pipe or piping system, the information required by this section shall be provided at points where direct employee exposure to the toxic or hazardous substances contained in said pipe or piping system is likely to occur under normal operating conditions.

(f) The employer may elect to withhold from any label otherwise required by this section the names of chemicals which qualify as trade secrets pursuant to section five. In the event such an election is made, the employer must instead place on the label a reference to the MSDS prepared for such substance and must otherwise comply with the labeling provisions of this section. When a substance has been designated a carcinogen, mutagen, teratogen, or neurotoxin pursuant to section four (c) of this chapter, and the name of said substance is withheld from the label as a trade secret pursuant to this subsection, the label shall display the letter "C", "M", "T", or "N", indicating the substance is, respectively, a carcinogen, mutagen, teratogen, or neurotoxin.

Section 8. The manufacturer of any toxic or hazardous substance shall prepare and provide direct purchasers of said toxic or hazardous substances with an MSDS which, to the best of the manufacturer's knowledge, is current, accurate, and complete, based on information then reasonably available to the manufacturer.

Any person other than a manufacturer who sells a mixture of toxic hazardous substance as defined in this chapter shall provide its direct purchasers of the mixture at the time of sale with a copy of the most recent MSDS or equivalent information.

Any person who produces a mixture may, for the purposes of this section, prepare and use a mixture MSDS, subject to the provisions of section ten.

A manufacturer who is responsible for preparing and transmitting an MSDS under the provisions of this section shall revise said MSDS, on a timely basis, as appropriate to the importance of any new information which would affect the contents of the existing MSDS, and in any event within one year of such information becoming available to the manufacturer.

Any employer who receives, compiles, or prepares new information which would serve to update the MSDS for any toxic or hazardous substance present in his workplace, and who has filed a copy of said MSDS with DEQE and the municipal coordinator

pursuant to section sixteen of this chapter, shall file an updated MSDS containing said new information on a semi-annual basis, and shall concurrently update his own copy of said MSDS.

Section 9. (a) Any person subject to the provisions of section eight shall be relieved of the obligation to provide a specific purchaser of a toxic or hazardous substance with a MSDS if he has a record of having provided the specific purchaser with the most recent version of the MSDS; or if the substance is labeled pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act; the Atomic Energy Act; the Food, Drug and Cosmetics Act; or if the article is one sold at retail and is incidentally sold to an employer or the employer's employees, in the same form, approximate amount, concentration, and manner as it is sold to consumers, and, to the seller's knowledge, employee exposure to the article is not significantly greater than the consumer exposure occurring during the principal consumer use of the article.

(b) If an employer is not supplied with an MSDS by a manufacturer or an intermediate seller for a toxic or hazardous substance pursuant to the mandates of section eight, said employer shall within a reasonable amount of time after discovering that an MSDS has not been supplied use diligent efforts to obtain said MSDS from the manufacturer or intermediate sellers. For purposes of this paragraph, "diligent efforts" shall mean a prompt inquiry by the employer to the manufacturer or intermediate seller of the toxic or hazardous substance requesting the MSDS with a copy of the request and any written response from the manufacturer or intermediate seller to be filed with the commissioners of DPH and DLI.

Provided, however, that for an independent contractor, or the commonwealth or any of its political subdivisions acting as an employer, "diligent efforts" shall mean a prompt inquiry to the workplace employer, rather than the manufacturer or intermediate seller, in cases where the relevant workplace is not wholly owned or controlled by the employing independent contractor, the commonwealth, or said political subdivisions.

If after having used diligent efforts an employer still fails to obtain an MSDS, he shall request the commissioner of DLI to obtain said MSDS on his or her behalf. The commissioner of DLI shall, in such cases, obtain any available assistance from the commissioner of DPH or DEQE in locating or compiling an up-to-date MSDS for the toxic or hazardous substance.

An employer who has used diligent efforts as defined herein and who has made a documented request to the commissioner of DLI pursuant to this section shall not be found in violation of sections eleven, fourteen or sixteen of this chapter with respect to the MSDS which was not supplied by the manufacturer or intermediate seller as required by section eight of this chapter.

Nothing contained in this chapter shall be construed to require an employer to conduct studies to develop new information.

Section 10. A manufacturer or employer may provide the information required by section eight of this chapter on an entire mixture, instead of on each toxic or hazardous substance

in it, when all of the following conditions exist:

(a) Hazard test information exists on the mixture itself, or adequate information exists to form a valid judgment of the hazardous properties of the mixture itself and the MSDS indicates that the information presented and the conclusions drawn are from some source other than direct test data on the mixture itself, and that an MSDS on each constituent hazardous substance identified on the MSDS is available upon request.

(b) Provision of information on the mixture will be as effective in protecting employee health as information on the ingredients.

(c) The toxic or hazardous substances in the mixture are identified on the MSDS unless it is either unfeasible to describe all the ingredients in the mixture or the identity of the ingredients is itself a valid trade secret; provided, that in either case the reason why the hazardous substances in the mixture are not identified shall be stated on the MSDS.

A single mixture MSDS may be provided for more than one formulation of a product mixture if the information provided pursuant to section fourteen does not vary for the formulation.

Section 11. (a) Every employer who manufactures, processes, uses or stores toxic or hazardous substances in the workplace shall provide a MSDS for each product which is present in said workplace. All MSDS's shall be available at a central location in the workplace.

(b) A completed federal OSHA Form 20 material safety data sheet shall constitute prima facie evidence of compliance with the requirements of this chapter relative to material safety data sheets, provided that said form includes a description of the acute and chronic health risks associated with exposure to the substance described.

(c) Any employee or his designated representative, may request in writing and shall have the right to examine and obtain the MSDS's for the toxic or hazardous substances to which he is, has been or may be exposed. The employer shall provide the MSDS within four working days, subject to the provisions of section nine (b). The employer may adopt reasonable procedures for acting upon such requests to avoid interruption of normal work operations.

(d) If an employee who has requested an MSDS pursuant to this section has not received said MSDS within four working days subject to the provisions of section nine (b), that employee may refuse to work with the substance for which he has requested the MSDS, until said MSDS is provided. Provided, however, that nothing contained herein shall be construed to permit any employee of the commonwealth or any of its political subdivisions to refuse to perform essential services.

(e) Every employer who manufactures, processes, uses or stores toxic or hazardous substances in the workplace shall post a notice in a central location in the workplace informing employees of their rights under this section.

(f) For the purposes of this section and section fourteen, an independent contractor, or the commonwealth or any of its political subdivisions shall maintain MSDS's for their own workplaces

only, as defined in section one; provided, however, that employees of such employers, insofar as they are exposed in the course of their employment to toxic or hazardous substances in other workplaces, shall have the right to examine MSDS's for those substances to which they are exposed from the workplace employer through a written request to their own employer.

Section 12. An employer or the preparer of an MSDS shall provide said MSDS, including information withheld as a trade secret, immediately on a confidential basis to an employee's treating physician who states in writing that in his professional judgment said employee's medical condition may be the result of occupational exposure to a toxic or hazardous substance present in the employee's workplace; provided, however, that such treating physician shall be required to sign concurrently, or in the case of geographical separation within twenty-four hours a confidentiality agreement, the form of which shall be promulgated by the commissioner of DPH. This agreement shall restrict the use of information to health purposes, prohibit disclosure of the information to anyone other than the treating physician and necessary medical personnel, and may provide for compensation or other legally appropriate relief for any competitive harm which may result from a breach of the agreement.

Section 13. No person shall discharge or cause to be discharged or otherwise discipline or in any manner discriminate against any employee for the reason that such person has exercised any right, made any claim or filed any complaint or suit or has instituted, or caused to be instituted, any proceeding under this chapter, or has testified, or is about to testify in any proceeding in his own behalf or on behalf of others; nor shall any pay, seniority or other benefits be lost by or denied to any such employee who has exercised any right provided by this chapter.

An employee who believes that he has been discharged, disciplined or in any other manner discriminated against by his employer for reason or reasons of exercising rights under this chapter may, within one hundred and eighty days of such violation or within one hundred and eighty days after obtaining knowledge that a violation did occur, file a verified complaint with the commissioner of DLI. A copy of the verified complaint shall also be sent by certified mail, return receipt requested, by the employee or his attorney to the employer at the time of filing with the commissioner of DLI. The employer, if he so chooses, may file with the commissioner of DLI an answer to the verified complaint, but must do so within twenty days of the receipt of the verified complaint from the employee or his attorney.

Upon receipt of a verified complaint and an answer, if one is so filed within the time period set forth in this section, the commissioner of DLI shall undertake an investigation of the alleged violation. If after a preliminary investigation, the commissioner determines that there is insufficient cause to believe a violation occurred, he shall so notify the complainant and employer within ten days of such determination. The employee or his attorney may, within ten days of such notice, request in writing

with a copy to the employer an adjudicatory hearing pursuant to the provisions of chapter thirty A of the General Laws.

If after a preliminary investigation, the commissioner of DLI determines that there is cause to believe a violation occurred, he or she shall so notify the complainant and employer within ten days, and shall conduct an adjudicatory hearing pursuant to chapter thirty A of the General Laws. If after such a hearing, the commissioner determines that the employer did violate the provisions of this chapter, he may take such remedial action as is appropriate, including the issuance of a cease or desist order or the ordering of any other affirmative steps to correct the violation and prevent its recurrence.

Any time an employee exercises the rights specified in subsection (d) of section eleven of this chapter, and files a complaint pursuant to this section and section three of this chapter, the commissioner of DLI shall hold an adjudicatory hearing to resolve said complaint within ten days.

Any person aggrieved by the determination of the commissioner may appeal such determination in the Superior court for the county in which the employer's workplace is located. Such determination shall be reviewed in accordance with the standards for review provided in section fourteen of chapter thirty A.

Section 14. Employers subject to the provisions of this chapter shall be required to maintain as records for a period of thirty years only the MSDS's required by section eleven. Such records shall be made available within a reasonable period of time to each former employee, or his designated representative for examination and copying.

Section 15. Employers shall furnish employees with instruction, on the nature and effects of those hazardous substances present in the workplace either in written form or in training programs as may be appropriate. Such instruction shall be in nontechnical language but may be generic to the extent appropriate and related to the job. Such instruction shall include the chemical name and any common names, unless withheld from an MSDS as a trade secret, of the toxic or hazardous substance to which an employee may be exposed under normal operating conditions, the location of the substance in the workplace, appropriate first aid treatment and antidotes in the event of improper exposure or overexposure, the proper and safe handling of said substance, the health effects of said substance as described in the relevant MSDS, and the rights and duties of employees as set forth in this chapter. Employers shall provide their current employees with instruction as described herein within ninety days of the effective date of this chapter and annually thereafter, and for employees hired thereafter, within the first month of employment, and annually thereafter.

Section 16. Every employer subject to the provisions of this chapter shall file with the regional office of DEQE for the region in which the workplace of the employer is located, and upon request with the municipal coordinator for the city or town in which the workplace of the employer is located, a copy of an MSDS for each toxic or hazardous substance listed on the Massa-

chusetts substance list and present in the employer's workplace. The municipal coordinator shall retain said MSDS's for at least five years and the regional office of DEQE shall retain said MSDS's for forty years.

Section 17. The commissioner of DEQE shall make a copy of an MSDS available to DLI or DPH upon request, and may make a copy of an MSDS available to any other agency of the commonwealth, but only upon written request including a justification by the requesting agency that the information contained in the MSDS is essential to the performance of a duty to protect the public health and safety imposed by statute or regulation. Provided, however, that when such action is taken by the commissioner of DEQE upon such request, he shall notify the employer or employers who provided the MSDS. And provided, further, that in the event of an imminent threat to public health or safety, the commissioner of DEQE shall waive the requirement for written request and justification.

Section 18. (a) A community resident in a city or town in which an employer subject to the provisions of this chapter is located, who has reason to believe that the utilization of a toxic or hazardous substance in the workplace by the employer is or may be endangering public health or safety, may file a petition with the municipal coordinator requesting an investigation. The petition shall state the grounds upon which the resident bases his belief that a toxic or hazardous substance is or may be endangering the public health and safety and shall inform the municipal coordinator of any information or data of which the resident has knowledge and which would assist the municipal coordinator in an investigation.

(b) The municipal coordinator shall within fifteen days review the petition and information submitted by the community resident to determine whether an investigation is warranted, and he may within ten additional days conduct an investigation of the charges contained in the petition pursuant to the authority provided by existing statutes, ordinances, or by-laws. The municipal coordinator shall notify the employer by certified mail, return receipt requested, of the filing of a petition within five days of said filing with the municipal coordinator and shall afford the employer an opportunity to comment on the petition and submit information or data which the employer deems pertinent to the petition.

(c) If upon review of the information and data submitted by the community resident and the employer, the information available under this chapter and the data obtained in the municipal coordinator's investigation, should he have determined to conduct one pursuant to the provisions of this section, the municipal coordinator determines that action is required to protect the public health and safety, he shall promptly notify the commissioner of DEQE of his findings and may take such action or request the commissioner to take such actions as are authorized by statute, ordinance or by-law to protect the public health and safety. If the commissioner is requested to take action by the municipal coordinator pursuant to this section, he may take such actions as are necessary to protect the public health and safety.

The commissioner shall also, where appropriate, provide relevant MSDS's to the petitioning resident provided, however, that the commissioner of DEQE determines that said request is not frivolous or intended to harass the employer. The commissioner's decision on release of the MSDS to the petitioning community resident shall be made within fifteen working days. Simultaneously, the municipal coordinator shall notify the community resident of the determination and shall provide the resident with a summary of the information contained in the petition, the response of the employer, the reasons for the determination, and a statement of the specific actions proposed by local or state officials to alleviate the danger to the public health or safety.

(d) If upon review of the information and data submitted by the community resident and the employer, and the information available through this chapter and the data obtained in the municipal coordinator's investigation, should he have determined to conduct one pursuant to the provisions of this section, the municipal coordinator determines that no action is required in order to protect the public health and safety, he shall promptly forward to the commissioner of DEQE for review, a report of the investigation including a summary of the information or data obtained by the municipal coordinator and the basis for the conclusion that no further action is required in response to the petition. Simultaneously, the municipal coordinator shall notify the community resident of his determination and shall provide the resident with a summary of the information contained or supplied with the petition, the response of the employer, and the reasons for the determination.

(e) If upon review of a petition of a community resident, the municipal coordinator determines that no investigation is necessary, he shall promptly notify the commissioner of DEQE of his decision and the reason for the determination. Simultaneously, the municipal coordinator shall notify the petitioning community resident that no investigation will be made and the reasons for this determination.

(f) Any petitioning community resident who believes that the response of the municipal coordinator to the petition does not adequately address the matters contained therein may request in writing within fifteen days of such response that the commissioner of DEQE review said response and take such action as the commissioner deems appropriate. The commissioner shall also, where appropriate, provide the relevant MSDS's to the petitioning resident, provided, however, that the commissioner of DEQE determines that said request is not frivolous or intended to harass the employer.

The commissioner shall review the request of the petitioning resident and make a determination thereon within fifteen days of its filing. The commissioner shall promptly notify the employer of the petitioning community resident's request within five days of its filing, and shall notify said employer of any release of an MSDS at the time of said release.

(g) A community resident or employer aggrieved by an action of the municipal coordinator or the commissioner of DEQE may

appeal such determinations in the Superior court for the county in which the resident resides or in which the employer's workplace is located. The determinations shall be reviewed in accordance with the standards for review provided in section fourteen of chapter thirty A.

(h) Except as provided in section nineteen, any municipal official other than the municipal coordinator shall be deemed a community resident and shall have those rights and obligations provided to community residents herein.

(i) Nothing contained herein shall be construed to confer additional or reduce current powers of local public officials under existing laws, ordinances, or by-laws.

Section 19. A municipal coordinator who has obtained an MSDS from an employer pursuant to section sixteen may make available to another municipal official for the city or town in which the workplace of the employer is located, a copy of an MSDS, if he determines that an imminent threat to public health or safety exists for which immediate access to information contained in the MSDS is critical to that other municipal official's performance of a duty imposed by statute, regulation, ordinance, or by-law. The municipal coordinator shall so inform the employer of the release of the MSDS to another municipal official.

Section 20. (a) A preparer shall provide an MSDS without trade secret information immediately on a confidential basis to a community resident's treating physician who states in writing that said resident's medical condition may be the result of exposure to a toxic or hazardous substance present in the said employer's workplace; provided, however that such treating physician shall be required to sign concurrently a confidentiality agreement, the form of which shall be established by the commissioner of DPH. This agreement shall restrict the use of information to health purposes, prohibit disclosure of information to anyone other than the treating physician and necessary medical personnel, and may provide for compensation or other legally appropriate relief for any competitive harm which may result from a breach of the agreement.

(b) A preparer shall provide the information withheld from an MSDS as a trade secret immediately on a confidential basis to a community resident's treating physician who states in writing that a medical emergency as defined in section one exists with respect to the resident; provided, however, that such treating physician shall be required to sign concurrently, or in the case of geographical separation, within twenty-four hours a confidentiality agreement, the form of which shall be established by the commissioner of DPH. This agreement shall restrict the use of information to health purposes, prohibit disclosure of the information to anyone other than the treating physician and necessary medical personnel, and may provide for compensation or other legally appropriate relief for any competitive harm which may result from a breach of this agreement.

Section 21. (a) Any information provided to state or local agencies or instrumentalities by manufacturers and employers pursuant to the provisions of this chapter, and any information

provided to their public agencies or coordinator pursuant to this chapter shall not be a public record for the purposes of chapter sixty-six of the General Laws.

(b) Any person who has obtained possession of or has access to information pursuant to the provisions of this chapter shall not disclose said information to any person not specifically authorized to receive it hereunder. Violation of this provision shall be punishable by a fine of not more than five thousand dollars or imprisonment for not more than one year, or both. Provided, however, that disclosure by an employee to his or her spouse, or to a fellow employee exposed to the same toxic or hazardous substance as is involved in the disclosure, shall not constitute a violation of this chapter.

SECTION 2. If any section of this act shall be held unconstitutional either on its face or as applied, the unconstitutionality of that section shall not affect the remaining sections of this act.

SECTION 3. This chapter shall take effect on the one hundred and eightieth day after it is approved by the governor, or ninety days after the commissioners of DPH, DLI, and DEQE certify to the secretary of the commonwealth that all rules and regulations to be adopted under this chapter have been promulgated whichever date occurs later.

Approved November 4, 1983.

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## SUMMARY

A Study of the Effects of Reagan Administration Policies  
on the Massachusetts Environment

September 1982

Submitted by:

Francis H. Duehay, City Councillor, Cambridge, Massachusetts; Member, National League of Cities Committee on Energy, Environment and Natural Resources; Member, National League of Cities Committee of Local Energy Officials

Nancy Anderson, Director of Environmental Programs, Lincoln Filene Center for Citizenship and Public Affairs, Tufts University; Editor, New England Environmental News; Past President, Massachusetts Association of Conservation Commissions

Dorothy LeMessurier, Member, Cambridge Plant and Garden Club; Editor, Conservation News and Action, a newsletter

Leslie Kirwan, Graduate Student, John F. Kennedy School of Government, Harvard University

The following individuals and organizations have associated themselves with the findings of this report:

- Friends of the Earth
- State Representative Michael J. Barrett of Reading
- George Wislocki, Director, Berkshire Natural Resources Council
- Kenneth Geiser, Professor of Urban and Environmental Policy, Tufts University
- Charles and Frances Webb
- Harvard Business School Professor Paul R. Lawrence and Martha Lawrence
- Kelly McClintock, Executive Director, Environmental Lobby of Massachusetts
- Pat King, Senior Lobbyist, Environmental Lobby of Massachusetts
- The Massachusetts Audubon Society

Civic and environmental leaders have recently completed a study of the effects of Reagan Administration policies on the Massachusetts environment. Emphasizing the deteriorating effects of these policies on the urban environment, the study pointed out that 83% of the population of Massachusetts live in urban areas. Four major areas of environmental concern were studied: Air Quality; Water Quality; Hazardous Wastes; and Parks and Recreation.

### AIR QUALITY

While the Reagan Administration has recently, under heavy pressure from health experts and environmentalists, reversed its decision to allow a higher lead content in gasoline, in every other facet of its air quality policy the Administration jeopardizes the public's health in Massachusetts' cities by supporting a weakened version of the Clean Air Act, by diluting existing EPA regulations, and by failing to act to control acid rain.

1. Weakening National Clean Air Standards - DEQE officials in Massachusetts say that they will be unlikely to meet existing National Ambient Air Quality Standards on schedule if the standards for auto emissions are weakened. This timetable as proposed by the Reagan Administration now projects meeting nitrogen dioxide standards by 1982 and attaining carbon monoxide standards in all but 4 cities by the end of 1987.

Currently, 22 carbon monoxide hot spots exist in Massachusetts, mostly in crowded intersections like Harvard Square and downtown Boston - but also in scattered sites across the state in Worcester, Lowell, Pittsfield, Springfield, Shrewsbury, and Yarmouth. If current standards are maintained, by 1987 hot spots will be eliminated everywhere except Boston, Worcester, Pittsfield, and Cambridge.

However, this study found that if the Reagan initiatives are accepted:

- the resulting doubling of nitrogen oxide and carbon monoxide emissions will retain existing hot spots and create new ones. The first new violations will occur in downtown Boston (Cambridge Street near Government Center, Leverett Circle, and Commonwealth Avenue at the B.U. Bridge)
- the proposed 25% increase in hydrocarbon emissions means more photochemical smog in Massachusetts cities
- the effectiveness of the automobile inspection maintenance program recently announced by the Commonwealth will be largely negated
- the state's recent initiative to fund an air toxics program (6 positions funded in FY '82) will be dropped in FY '83 due to budget cuts at the EPA

2. Acid Rain - A study by the Northeast Regional Task Force on Acid Deposition assesses acid rain-related effects to the New England/New York region costing an estimated \$2.5 billion per year, including fishing and tourism losses, drinking water treatment, crops and vegetation losses, lumber and paper production losses, and accelerated deterioration of concrete, mortar, textiles, paint, and other man-made materials, as well as stone and metals.

In addition to this huge financial cost, this study found that:

- Massachusetts has the most acidic rainfall of any state in the union
- the probability of dying from air-pollution related diseases is significantly higher in the Northeast than elsewhere in the U.S. The estimated costs of acid rain in New England are conservative because they do not take into account long-term environmental or health effects
- acid rain affects water quality in Massachusetts by polluting reservoirs directly, by causing metals to leach into groundwater supplies, and by damaging waterpipes
- a number of cities in Massachusetts will soon have to treat their water for acidity, as Springfield now does
- President Reagan's efforts to exempt new coal fired boilers from emission regulations and to authorize increased sulfur dioxide emissions will increase acid rain in Massachusetts

### WATER QUALITY

EPA's grant to Massachusetts for water quality programs will be cut by 20% in FY '83. This grant helps to pay for the state's water supply, water pollution control, and wetlands protection programs, all of which will be hurt by the federal reduction.

This study found that:

- the Comprehensive Water Planning program (the 208 program) will be terminated on September 30. The elimination of eight federally funded positions in this program means the state will abandon efforts to test all the aquifers in the state; to find new drinking water supplies; to develop a comprehensive strategy to protect groundwater from highway runoff which affects water quality in a number of communities; to provide technical assistance to local planning boards to protect groundwater from pollution
- while a state bond issue will prevent the elimination of any water pollution control programs, the pace of inspections and permitting will be slowed, translating into costs for industries
- DEQE will no longer have the resources to assist industry in wastewater planning to the extent it has done in the past
- while water quality in Massachusetts' rivers improved dramatically, 45% of our waterways meeting national standards in 1980 as opposed to 14% in 1970, DEQE can no longer guarantee that its plan to raise this figure to 65-70% by 1987 can be met
- the budget cuts mean that all state initiative in the area of controlling toxic effluents will be stopped
- despite optimism from the Secretary of Environmental Affairs that the state on its own will complete the project, these budget cuts spell a slowdown in the massive Boston Harbor cleanup effort, now only one-third complete

### HAZARDOUS WASTES

Massachusetts has serious problems with hazardous wastes. Six Massachusetts cities are included in EPA's list of Superfund sites have highest priority for federal funding to clear them up: Woburn, Ashland, Tyngsborough, North Dartmouth, Lowell and New Bedford. By February of 1982, the DEQE has confirmed 46 hazardous

waste sites across the Commonwealth and shut down 70 wells in 30 communities due to chemical contamination. Even though EPA officials have promised money and manpower assistance, this study found:

- for all the talk, actual federal presence at these sites has been non-existent, and to date no clear up has been undertaken anywhere in Massachusetts
- EPA requires such exhaustive documentation that it is difficult and expensive to get a site qualified for Superfund
- EPA requires the states to enter into lengthy and expensive litigation with the sites' owners while the dumpsites lie untouched and the health risks persist
- at the Woburn site, while one of the principal generators has signed a consent agreement to perform a full site investigation and to clean up its share of the damage, the other one hasn't. The study will not be complete for another year. The actual clean-up, if one is ever done, will not begin for another 1½ to 2 years, a full 4½ to 5 years after the disclosure of this serious threat
- EPA currently prefers to spend its Superfund money on "quick and dirty" waste spills like truck overturns, rather than on the older sites where clean-up costs are high and where the drama has passed apparently
- at the New Bedford site, EPA has told the polluting industries to prevent further harbor dumping by capping the waste sources with asphalt. No clean-up of the harbor is envisioned, leaving that waterway full of PCBs, a toxic substance known to cause birth defects and liver and skin disorders, and suspected of causing cancer
- out of the \$298 million the Treasury collected for Superfund in 1982, the EPA requested only \$190 million, spent only \$90 million, only \$75 million on site
- the federal money to fund the state program for early detection and planning to stop future hazardous wastes has been cut by 16% for FY '83. The failure to fully fund RCRA means that although the regulations for small industries who generate the bulk of the waste will be in place, the pace of licensing (3,000 to 5,000 ultimately required) will be slowed and perhaps stopped.

#### PARKS AND RECREATION

The Reagan Administration's decision to cut the Land and Water Conservation Fund has serious consequences for Massachusetts' cities. During the current year,

FY '82, the administration asked Congress to appropriate less than a tenth of what President Carter had asked for and restricted the use of the money solely to the National Park system, eliminating all state and local grants. Our study found that:

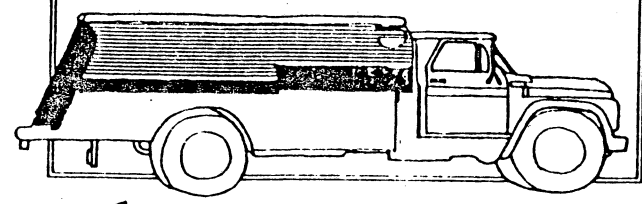
- the expansion of the Heritage State Parks program to include Lynn, Lawrence, Gardner, North Adams, Holyoke, Springfield, and Fall River is seriously threatened. For example, in Holyoke only a 1.5 acre park will be completed where original plans had included one for 7.4 acres. An esplanade has been eliminated from the Lawrence plan, leaving blocks of deteriorating buildings standing. Planners estimate that only 60-70% of park facilities will be complete when the budget is exhausted
- \$700,000 to complete the extensive waterfront development at the Charlestown Navy Yard was never received, forcing the BRA to substitute a bare-bones version
- the Metropolitan District Commission has lost a major source of revenue for needed park and recreation projects
- while waiting for LWCF grant to install a solar heater and energy efficient doors and windows in its public swimming pool, Brookline has no pool because without these energy saving features, the pool is too expensive to fund. During the two years the town has been waiting, the cost of the project has increased from \$265,000 to \$450,000
- in Somerville, a densely populated city which desperately needs recreation space, only 2½ of 3 park projects can go forward
- some 40 municipal projects throughout the state will be reassessed or cancelled

DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING  
**DEQE**

**HAZARDOUS WASTE  
MANIFEST  
TRACKING SYSTEM**

**TRANSPORTER**

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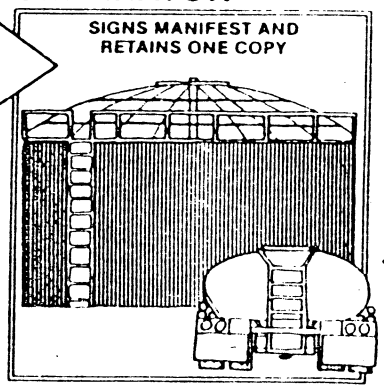


**DEQE COMPUTER SYSTEM**



**GENERATOR**

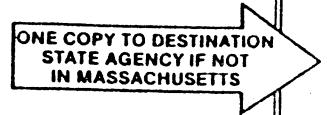
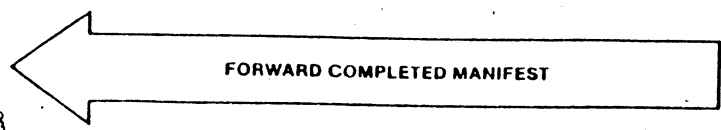
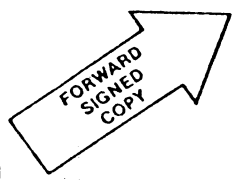
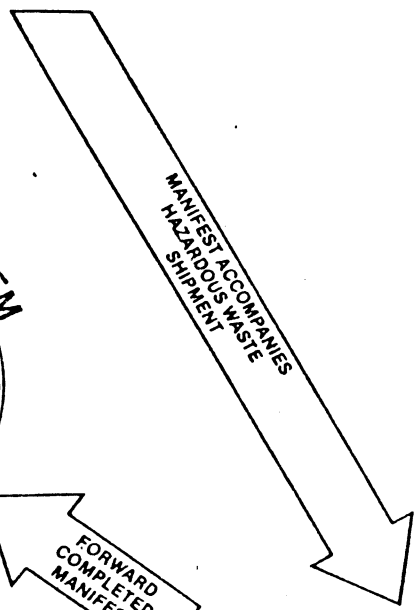
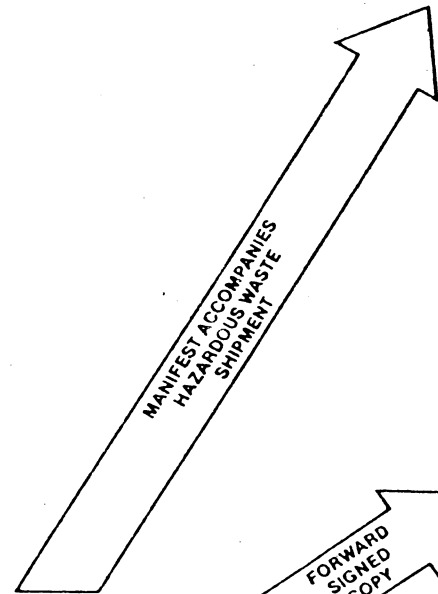
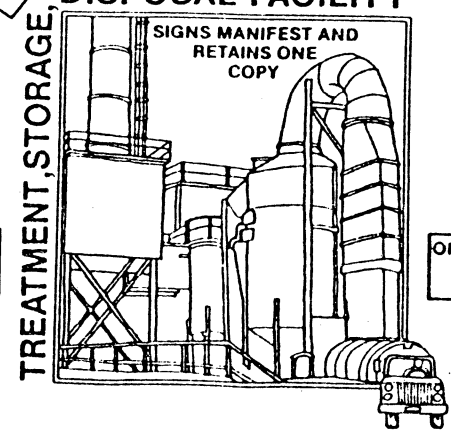
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TRACKING BEGINS AS MANIFEST LEAVES GENERATOR

**DISPOSAL FACILITY**

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PROPOSED ORDINANCE

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SECTION 1: Authority

This Ordinance is adopted by the City of Cambridge under its home rule powers, its police powers to protect public health and welfare, and its authorization under G.L. C. 40, Section 21.

SECTION 2: Definitions

The following definitions shall apply in the interpretation and implementation of this Ordinance.

"Chief," the chief of the Fire Department of the City of Cambridge.

"Commissioner," the Commissioner of the Department of Health and Hospitals of the City of Cambridge.

"Container," any receptacle or formed or flexible covering for the storage or transport of toxic or hazardous substances including but not limited to a bag, barrel, bottle, box, can, carton, cylinder, drum, pipe, storage tank, both mobile and stationary, vessel or vat.

"Facility," means a building, appurtenant structures, or surrounding land area used by a single business entity at a single location or site.

"Inspectional Services Commissioner," the Commissioner of the Department of Inspectional Services of the City of Cambridge.

"Inventory," the document to be submitted by any person who stores toxic or hazardous substances to the Health/Fire

Departments pursuant to Section 4 of this Ordinance. The inventory shall list all toxic or hazardous substances stored on the premises and shall specify their types, quantities, location and method of storage.

"Label," the written, printed and graphic information displayed on or affixed to the container of a toxic or hazardous substance; or the placards, signs, or operating instructions which communicate the information required.

"Material safety data sheet," or "MSDS," means the document defined in St. 1983, C. 470, s. 1, as amended, which sets forth the following information for a toxic or hazardous substance:

(1) The chemical name, any common names, and the Chemical Abstracts Service (CAS) number of the toxic or hazardous substance.

(2) The hazards or other risks in the use of the toxic or hazardous substances, including:

(a) the potential for fire, explosion, corrosivity, and reactivity;

(b) the acute and chronic health effects of risks from exposure, including the medical conditions that might be aggravated by exposure; and

(c) the potential routes of exposure and symptoms of overexposure.

(3) The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic or hazardous substances, including appropriate emergency treatment in case

of overexposure at hazardous levels.

(4) The emergency procedures for spills, fire, disposal and first aid.

(5) A description in lay terms of the specific potential health risks posed by the toxic or hazardous substance intended to alert any person reading this information, including but not limited to carcinogenic, mutagenic, teratogenic, or neurotoxic effects, for substances so designated on the Massachusetts Substance List.

(6) The month and year that the information was compiled and the name, address, and emergency telephone number of the manufacturer.

The MSDS shall be updated as required by St. 1983, C. 470, as amended.

"Municipal coordinator," the person designated by the city manager as municipal coordinator pursuant to St. 1983, C. 470.

"Person," means any individual, partnership, association, firm, company, corporation, department, agency, group, including a city, town, county, state, or other governmental unit, or any other entity responsible in any way for an activity subject to this Ordinance.

"Research laboratory," a workplace or a work area of a workplace used primarily for research, development, non-routine testing or experimentation activity in which toxic or hazardous substances are used by or under the supervision of a technically qualified individual as defined in St. 1983, C. 470, section 1. However, a research laboratory shall not include

a laboratory involved in the production or manufacture of goods for direct commercial sale.

"Storage facility," means any tank, sump, wet floor, waste treatment facility, pipe or pipes, or portable or fixed container.

"Substance list," means the list of toxic or hazardous substances published by the Massachusetts Department of Public Health pursuant to St. 1983, C. 470.

"Toxic or hazardous substances," substances listed on the Massachusetts Department of Public Health Substance List, and substances designated in regulations issued by the Commissioner of the Department of Health and Hospitals.

"Trade secret," any formula, pattern, device, or compilation of information which is used in an employer's or manufacturer's business, and which gives said employer or manufacturer an opportunity to obtain an advantage over competitors who do not know or use it.

"Unauthorized discharge," shall mean any release or emission of any hazardous material that presents a threat to life, health or property (or one that escapes the secondary containment).

"Wet floor," means a floor which is used routinely to collect, contain or maintain standing liquids or to transmit standing liquids on a more or less continuous basis.

"Work area," a room or defined space in a workplace.

"Workplace," means a facility or business of an employer at one geographic location at which work is performed, and containing one or more work areas.

SECTION 3: Permit

Every person who stores toxic or hazardous substances in quantities totaling more than five gallons liquid volume or thirty pounds dry weight shall obtain a permit from the Health/Fire Departments for such storage. All permits issued by the Health/Fire Departments shall be posted in a conspicuous location on the premises. Facilities holding a valid permit or license for flammables from the Fire Department need not obtain an additional permit or license for said flammables. Permit applications shall be on forms provided by the Health/Fire Departments.

SECTION 4: Inventory

An inventory of toxic or hazardous substances that are stored by the permittee shall be submitted as a part of the permit application, including the types, quantities, location and method of storage of said toxic or hazardous substances. Inventories shall not be a public record for the purposes of Chapter 66 of the General Laws.

Any change to the inventory shall be submitted by the permittee for approval to the Health/Fire Departments prior to any change.

Toxic or hazardous substances contained solely in consumer products stored in retail establishments or used by the general public or commercial products used at a workplace for janitorial or minor maintenance purposes need not be included in the inventory.

SECTION 5: General Requirements

Before granting a permit, the Commissioner/Chief may require the following:

(a) The separation or isolation by both primary and secondary containment of any materials that, in combination with other substances, may bring about a fire or explosion, or may liberate a flammable or poisonous gas, or cause the deterioration of the primary or secondary containment.

(b) The storage of toxic or hazardous substances separate from the workplace.

The Health/Fire Departments may require that containers of toxic or hazardous substances be stored on an impervious chemical resistant surface, and that provisions be made to contain the substance in the case of accidental spillage.

Storage cabinets shall conform to nationally recognized health and safety standards and good practices.

Storage facilities shall be secured in such a manner as to prevent unauthorized access.

Where kept for retail sale in containers usual to the retail trade, storage of toxic or hazardous substances shall be neat and orderly and shelves shall be of substantial construction.

Dispensing and mixing of toxic or hazardous substances must not be done in such manner as to substantially increase the risk of an unauthorized discharge.

When toxic or hazardous substances are moved into or out of or within a storage facility, they shall remain in the travel path only for the time reasonably necessary to

transport them and such movement shall be in a manner which will not increase the risk of an unauthorized discharge.

Visible hazard identification signs as specified by the Health/Fire Departments shall be placed at all entrances to and in locations where toxic or hazardous substances are stored, handled or used.

Satisfactory provisions shall be made by the permittee for containment, neutralization and removal of spills or leakage of toxic or hazardous substances which may occur during storage, handling, transportation or use. This shall include necessary safety clothing, materials and equipment for personnel. The permittee shall furnish to the Health/Fire Departments a list of the above clothing, materials and equipment which shall be regularly tested and maintained.

Material safety data sheets shall be readily available to the Health/Fire Departments for all toxic or hazardous substances on the premises.

Every person who stores toxic or hazardous substances shall clearly label every container with the chemical name of such substance or substances contained therein, except that containers labeled under provisions of other statutes or regulations need not be relabeled. Such person may withhold from such label the chemical name of a substance if said name is a trade secret as defined in St. 1983, C. 470.

Aboveground containers containing toxic or hazardous substances shall be stored on a surface impervious to the materials being stored. The storage area shall be enclosed by a permanent dike of impermeable construction. The volume

of the area enclosed by the dike shall be equal to or greater than the capacity of the largest container within the dike.

The following provisions shall apply to all underground liquid toxic or hazardous substances storage tanks with the capacity of 500 gallons or greater:

(a) The permittee shall file with the Health/Fire Departments the size, type, age, and location of each tank, and the type of toxic or hazardous substances stored in each as part of the permit application. Evidence of date of purchase and installation, including Health/Fire Departments permit/license, if any, shall be included along with a sketch map showing the location of such tank or tanks on the property.

(b) Owners or operators of tanks for which evidence of installation date is not available shall have such tanks tested. If the Health/Fire Departments determine that the tank leaks, it shall be repaired or disposed of under the direction of the Health/Fire Departments.

(c) All tanks shall be subject to one of the following tests 5 years after certification of installation and annually after 10 years after certification: a five-pounds per square inch air pressure test performed on an empty tank, or a Kent-Moore Pressure test, or any other testing system approved in advance by the Health/Fire Departments. Certification of testing shall be submitted to the Health/Fire Departments. Any tank failing the test shall be repaired or disposed of under the direction of the Health/Fire Departments.

(d) All leaking tanks must be emptied by the owner or

operator within twelve hours of leak detection and repaired or removed by the owner or operator in a time period to be determined by the Health/Fire Departments.

Any person who stores toxic or hazardous substances shall immediately report any unauthorized discharge of toxic or hazardous substances to the Health/Fire Departments, and the Department of Environmental Quality Engineering (DEQE).

Where specific requirements are not otherwise established, storage, transportation or use of toxic or hazardous substances shall be in accordance with nationally recognized standards of good practices. This may require that the permittee bear the expense of consultation by a suitably qualified independent engineer, or chemist, or other appropriate professional consultant, when deemed appropriate by the Health/Fire Departments for the purpose of evaluating and rendering a professional opinion respecting the adequacy of such practice to achieve the purposes of this Ordinance. The Health/Fire Departments shall be entitled to rely on such evaluation and/or opinion of such engineer, chemist or professional consultant in making the relevant determinations provided for in this Ordinance. The consultant shall be selected by the permittee from a list of consultants furnished by the Health/Fire Departments.

#### SECTION 6: Exemptions

The Health and/or Fire Department may exempt any person from the requirements of this Ordinance where it can be demonstrated to the satisfaction of the Health/Fire Departments that the substance in question in the quantity and/or solution

stored does not present a significant actual or potential hazard to the public health, safety, or welfare.

A person who stores toxic or hazardous substances intended to be used in a research laboratory is exempted from the requirements of this Ordinance, provided that:

(1) The quantities stored are not greater than reasonably necessary for such purposes.

(2) The substances have not been designated as "specially hazardous substances" in the regulations issued under this Ordinance.

#### SECTION 7: Rules and Regulations

The Commissioner of the Department of Health and Hospitals and the Chief of the Fire Department may promulgate rules and regulations necessary to carry out their respective responsibilities under this Ordinance. In order to avoid the promulgation of conflicting rules and regulations, the Commissioner and the Chief shall take such steps as are necessary to ensure that proposed rules and regulations are consistent with the rules and regulations of the other department.

#### SECTION 8: Enforcement

The provisions of this Ordinance shall be enforced by the Health/Fire Departments. The agents of the Health/Fire Departments may, according to law, enter upon any premises at any reasonable time to inspect for compliance.

Upon request of an agent of the Health/Fire Departments, the owner or operator of any premises at which toxic or hazardous substances are used or stored shall furnish all

information required to monitor compliance with this Ordinance including, but not limited to, the inventory and the permit application, and a description of measures taken to protect storage containers from vandalism, corrosion and spillage.

All records pertaining to storage, removal and disposal of toxic or hazardous substances shall be retained by the permittee for no less than three years, and shall be made available for review by any agent of the Health/Fire Departments upon request.

The Inspectional Services Commissioner shall condition issuance of building and/or occupancy permits upon conformity with the requirements of this Ordinance respecting any toxic or hazardous substances to be used in the course of such occupancy.

Written notice of any violation of this Ordinance shall be given by an agent of the Health/Fire Departments, specifying the nature of the violation. Said notice may include an order or orders regarding any corrective measures that must be undertaken, including containment and cleanup of discharged materials; any preventive measures required for avoiding future violations; and a time for compliance. Requirements specified in such notice shall be reasonable in relation to the public health hazard involved and the difficulty of compliance. The cost of containment and cleanup shall be borne by the owner and/or operator of the premises.

If any owner or operator of a facility is aggrieved by the notice of violation by the Health/Fire Departments,

that person may within five (5) business days file a written request for an administrative hearing with said Departments. Such request shall state the reasons for the hearing request.

If any person who stores toxic or hazardous substances fails to comply with the provisions of this Ordinance by knowingly and intentionally misrepresenting, falsifying, concealing, destroying, or failing to retain information necessary to comply with the provisions of this Ordinance, they shall be personally liable, whether or not such employer is a corporation, to the extent that such liability may be imposed under the laws of the Commonwealth of Massachusetts.

Permits may be suspended by the Health/Fire Departments for failure of any person who stores toxic or hazardous substances to comply with the requirements of this Ordinance.

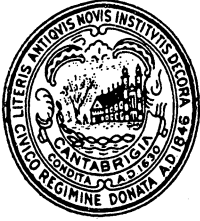
For serious or repeated violations of any of the requirements of this Ordinance, or for interference with the Health/Fire Departments in the performance of its duties, the permit may be permanently revoked after an opportunity for a hearing has been provided by the Health/Fire Departments. Prior to such action, the Health/Fire Departments shall notify the holder of the permit in writing, stating the reasons for which the permit is subject to revocation and advising that the permit shall be permanently revoked at the end of five days following service of such notice, unless a request for a hearing is filed with the Health/Fire Departments by the holder of the permit within such five day period. A permit may be suspended for cause pending its revocation or a hearing relative thereto.

The city solicitor may institute appropriate legal action, either civil or criminal which may, in the judgment of the city solicitor, be necessary for the enforcement of any order or orders issued pursuant to this Ordinance or the abatement of any nuisance or hazard against which such order was directed.

Penalty for failure to comply with any provision of this Ordinance shall be (                      dollars) per day per violation.

SEVERABILITY

If any provision or section of this Ordinance or the enforcement of any such provision or section is held to be invalid or unenforceable by a court of competent jurisdiction, such invalidity or unenforceability shall not affect or render invalid or unenforceable any other provision or section of this Ordinance. To this end, each of the provisions and sections of this Ordinance are severable.



# CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139  
Tel. 498-9011

EXECUTIVE DEPARTMENT  
ROBERT W. HEALY  
City Manager

August 15, 1984

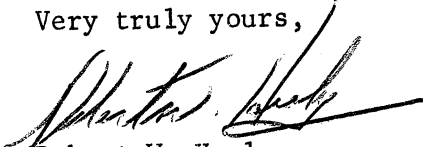
To the Honorable, the City Council:

Enclosed is a report and a proposed Ordinance, both addressing the issue of toxic chemicals and hazardous substances in Cambridge, prepared by Dr. Chalfen. The report and ordinance have been in preparation over the last year and a half and have been designed to be coordinated in appropriate way with the Massachusetts Right-to-Know Act which was not approved until November, 1983.

The proposed ordinance is based not only on models from several cities in the country, but also tailored to the needs of Cambridge. In its preparation, the Fire Department, through Chief Scott and Deputy Cantwell, was closely involved. Consultations were also held with representatives of the Department of Traffic and Parking, the Police Department, Civil Defense, the Water Department, the National Fire Protection Association and safety officers of Cambridge businesses and universities. Mr. Allright in the Cambridge Law Department has assisted in reviewing and indicating changes in the ordinance for legal appropriateness, changes which have been made. Copies of the proposed ordinance were also submitted to the Cambridge Health Policy Board for input. The Scientific Advisory Committee has the proposed ordinance for review in their deliberations.

There is general agreement that work will continue on the issues of transportation and emergency response.

Very truly yours,

  
Robert W. Healy  
City Manager

RWH/b

Agenda Item Number One **S-523**

Re: enclosing a report & proposed ordinance  
pertaining to the issue of toxic chemicals &  
hazardous substances in Cambridge.

*Copies of full report  
supplied by Health Dept  
to C Council & Scientific  
Advisory Board (per  
mgr's off)*

*Copy of transmittal letter  
sent to Dr. Chalfen &  
Chairman Comm on Env.*

*In City Council, 8/24/84 (ae)*

August 15, 1984

*8/15/84*

*PROBATION OF COUNCILOR  
DOCKNEY TO REFER TO  
COMMITTEE ON ENVIRONMENT  
AND SCIENTIFIC ADVISORY  
COMMITTEE EARLIER ON*