

TESTIMONY #6
Jackson Browning
April 17, 1980

CMA 049730

WRITTEN
STATEMENT OF
JACKSON B. BROWNING
ON BEHALF OF THE
CHEMICAL MANUFACTURERS ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON
WATER RESOURCES
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U. S. HOUSE OF REPRESENTATIVES
ON
HAZARDOUS SUBSTANCE SPILLS

APRIL 17, 1980

Chemical Manufacturers Association
1825 Connecticut Avenue, N.W.
Washington, D.C. 20009
(202) 328-4200

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I am Jackson Browning, Director of Health, Safety and Environmental Affairs for Union Carbide Corporation. Today I am speaking on behalf of the Chemical Manufacturers Association (CMA), a nonprofit trade association having 195 U.S. company members that represent more than 90 percent of the production capacity of basic industrial chemicals within this country.

The members of our Association are strong supporters of spill prevention and control programs. We are well aware that some substances, when spilled or improperly handled, can pose a threat to human health and the environment. We believe that existing law -- the Federal Water Pollution Control Act -- provides an appropriate mechanism for responding to spills of hazardous substances. Title II of the Roberts-Breaux-de la Garza bill (H.R. 5338) is an important and useful modification of this Act, and one which CMA strongly endorses.

CMA continues to stress the need for new Federal legislation to deal with problems that may arise from abandoned and inactive ("orphan") disposal sites. Although the States are managing their waste site problems in a very responsible manner, CMA believes that Federal funds will be needed to assist them in the cleanup of "orphan" disposal sites. CMA is opposed, however, to legislation which combines oil spills, hazardous substance spills, and abandoned and inactive dumpsites into one liability and compensation fund.

I. CMA's POSITION

A. THE ULTRAFUND APPROACH IS INAPPROPRIATE

The Ultrafund concept of combining oil spills, hazardous substances spills and abandoned and inactive hazardous waste disposal sites all into one liability and compensation fund is inappropriate. These subjects are each different in nature, are addressed in differing degrees by Federal and State legal mechanisms already in place, and should receive separate and distinct consideration.

First, oil spills should be handled separately from chemical spills. The differences between oil and chemicals justify their separate legislative consideration. Among these are mode of transportation; normal bulk of shipments; number of shipments and the characteristics of the materials themselves (including uniformity, dispersal, purity, etc.). Oil is produced, transported and sold in a uniform manner in much larger volumes than chemicals. When spilled in water, oil products generally float, are not easily dispersed, and can be physically contained and removed. Chemicals, however, exhibit a great variability of physical and chemical properties. They may be soluble or insoluble and include liquids, solids, and gases. Some float in water, some sink and some evaporate. Whether a chemical will be a cause for concern when spilled depends on a variety of circumstances, for example, the size of a stream into which a substance is spilled and the degree of toxicity of the substance. Thus, legislation designed to address oil spills should not necessarily set the precedent for the regulation of spills of hazardous substances.

Second, chemical spills should be handled separately from waste disposal incidents. The effects, mitigation techniques and remedies for each situation are very different in nature and merit separate legislative consideration. Congress took note of these differences when it decided to deal with spills and disposal incidents in two different statutes, the Federal Water Pollution Control Act and the Resource Conservation and Recovery Act. There is no reason to change this policy.

B. SECTIONS 311 AND 504 OF THE CLEAN WATER ACT PROVIDE AN ADEQUATE MECHANISM FOR DEALING WITH SPILLS OF HAZARDOUS SUBSTANCES.
A "SUPERFUND" FOR SUCH SPILLS IS NOT NECESSARY.

Spills of hazardous substances into navigable waters are addressed by Section 311 of the Clean Water Act. This is an area that CMA has been deeply involved in both legislatively and judicially. In 1978 we worked with EPA and the Congress to improve the language of 311 and these changes were adopted.

Section 311, as amended, provides a comprehensive system of law to deal with problems which result from spills of hazardous substances. This section is the product of more than seven years of legislative study, implementation efforts and legal tests. It now provides:

- strong incentives for the safe handling of designated hazardous substances, prompt reporting of spill incidents and immediate cleanup by the spiller;
- stiff penalties for violations of the law;
- full authority for the EPA to take action where a spiller

is unknown or does not act promptly;

- a fund of \$35 million for governmental action, when needed, to pay for mitigation of damage, cleanup efforts and restoration of the damaged area;

- legal actions against spillers and recovery of fund monies expended for cleanup;

- a program for comprehensive listing of hazardous substances which could present an imminent and substantial danger to public health or welfare if spilled, with full authority in EPA to revise the list of elements and compounds as necessary; and

- no limit or modification of the rights of a person to pursue any legal recourse for damages caused by spills.

Thus Section 311 of the Clean Water Act authorizes a total of \$35 million per year to promptly address problems caused by spills in those relatively few instances where they present significant problems and where the spiller does not act. We see no need to duplicate or set aside this detailed existing mechanism for a new Ultrafund concept.

In addition to the foregoing, Section 504 of the Clean Water Act authorizes EPA action "to prevent, limit or mitigate" imminent and substantial danger from the release of any pollutant. For these purposes, the Act authorizes an annual appropriation of \$10 million so that the government may provide emergency assistance notwithstanding other limitations or constraints. Unfortunately, no money has ever been appropriated for this section.

The provisions of Section 2 of the Roberts-Breaux-de la Garza bill (H.R. 5338) are an important step toward activating Section 504.

We applaud you, Mr. Chairman, and the Members of the Subcommittee for recognizing the importance of Section 504 by introducing H.R. 5338, Section 2. We support your effort.

We would again state our view, however, that oil spills and hazardous substances spills should be treated in separate bills. The differences between oil and chemicals justify their separate consideration by this Subcommittee rather than being incorporated into one legislative package.

C. THE EPA SHOULD COMPLETE THE STUDY ON HAZARDOUS SUBSTANCES SPILLS MANDATED BY THE 1978 AMENDMENTS TO THE CLEAN WATER ACT.

The 1978 amendments to the Clean Water Act mandated that EPA conduct an 18-month study of hazardous substances spills. The study was directed toward liability limits, third party damages, penalties and fees, and other important issues. We believe that EPA should complete the study before enacting "Ultrafund" legislation which would overlap existing law and arbitrarily supplant existing legal remedies. If fact, it is likely that the data used to justify such legislation for chemical spills are imprecise and exaggerated, both with regard to frequency and potential impact. In such circumstances, it is essential that this Committee use the full force of its influence to convince the Environmental Protection Agency that the study of spills of hazardous materials authorized in the Clean Water Act Amendments of 1978 is timely, necessary, and a prerequisite to further legislative action.

D. THIRD PARTY COMPENSATION

CMA believes that common law and statutory law in the various states provide a flexible and responsive system for compensating individuals for personal injury and property damage that may occur from spills of hazardous substances. In view of the responsiveness of the system, the potential unfairness to defendants in creating a parallel system of liability, and the great burden on the federal courts resulting from creation of a federal private cause of action, creation of such a cause of action is both unnecessary and unjustified. We strongly recommend that tort litigation remain within the traditional expertise of state courts.

The existing state tort law system offers a dynamic mechanism for compensating injured parties. Any problems that may arise can be satisfactorily handled within this system through the proven vehicle of tort law reform. Where current remedies are viewed as deficient (for instance, too slow), states have the ability to alter the law to rectify the shortcomings.

There will, of course, be variations in theories of liability from state to state. This is as it should be. States should have such flexibility without federal intervention in the tort law system. Third party compensation is better left to the states, which historically have had jurisdiction over tort actions.

E. NEW LAW IS NEEDED FOR OLD DUMPSITES

Congress should establish a Federal fund to provide for emergency assistance and containment of "orphan" dumpsites where there is an imminent threat and no other party is taking responsible action. The fund should be financed by Federal appropriations, recoveries from wrongful dumpers, and matching monies from state governments.

II. SPILL PREVENTION AND RESPONSE PROGRAMS IN THE CHEMICAL INDUSTRY

I would now like to discuss how the chemical industry has been a leader in safety and response to chemical emergencies.

A. CMA MEMBERS HISTORICALLY PROMOTE THREE BASIC PRINCIPLES WHICH ARE ACCEPTED BY MANUFACTURERS, DISTRIBUTORS, CUSTOMERS AND CARRIERS:

1. Proper training and information should be given to:
 - employees
 - carriers
 - distributors
 - customers
2. Safety in manufacturing, storage, packaging, labeling and transportation is essential.
3. Prevention of spills, technical improvements in chemical handling, and proper use of mechanical devices protect human health and the environment.

Responsible management of chemicals can be taught and safety records prove that training, correction and practice are the best methods of preventing spills.

B. HOW INDUSTRY COPE WITH CHEMICAL SPILLS

Although not widely publicized, several mutual assistance groups exist. For example, if a spill, fire, or other incident involves chlorine, vinyl chloride, hydrogen sulphide or pesticides, there are emergency response teams committed to assist across the country. These groups assume large liability risks whenever they aid in emergency situations. In spite of the risks, these companies have committed their resources to responding to emergency situations.

The chemical industry has a strong commitment to emergency spill response efforts, which the following examples further illustrate:

- Spill emergency centers are operated around the clock by CMA and several related trade associations.

- Most chemical companies maintain emergency response teams to cope with transportation accidents and similar problems involving their products.

- Emergency response personnel are experts who constantly improve their skills through training provided by their companies and trade associations.

This does not mean that industry is complacent about spills. CMA joined in a program with the Association of American Railroads to study rail-related spills to the environment and causes of accidents. The study concludes that from 1975 through 1977, approximately 35 percent of all rail accidents involved hazardous materials and only one percent of all such accidents resulted in spills of hazardous substances. In most instances reported to CMA, the

shipper has provided remedial advice and has participated in cleanup efforts.

Cleaning up a spill, especially those in small quantities, can be as simple as spreading kitty litter on a phosphate pesticide and pouring laundry bleach over it. Much less frequently, spills incidents require more extensive measures: drilling wells to remove contaminated groundwater, for example. In such cases, the groundwater is passed through large activated carbon treatment plants to decontaminate the material. In some instances involving organic chemicals, the spill is dammed and activated carbon placed in the line of flow to treat the material.

One chemical company has developed a mathematical model of air and water conditions to predict the dispersion and transport characteristics of accidental incidents. This would allow proper placement of cleaning equipment and evacuation of downstream residents, if such should become necessary.

C. EMERGENCY CENTERS

Since 1971, CMA has operated from its Washington headquarters a Chemical Transportation Emergency Center, CHEMTREC, to provide authoritative information to public agencies and transportation companies faced with emergencies involving chemical shipments. Manning a toll-free number around the clock, CHEMTREC's experts work with files on more than 3,600 chemicals and 14,000 trade names to advise those on the scene what to do -- and what not to do -- to handle an emergency. After advising emergency crews

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on the scene, CHEMTREC contacts shippers so follow-up aid can be handled by their experts.

CHEMTREC collaborates with similar programs operated by other organizations. The Chlorine Institute, for example, through its Chlorine Emergency Plan, CLOREP, sends an expert to the scene of any chlorine incident -- no matter how small. Operated through a network of local teams, the companies are committed to send their staff to help with any incident in their area, even if the problem was created by a competitor. The National Agricultural Chemicals Association has a similar network for pesticides.

An impediment to this mutual assistance activity, however, is the liability problem. This kind of voluntary assumption of responsibility can lead to potential liability -- once one undertakes to render aid, that person may be held liable for failure to exercise due care.

Consequently, CMA believes that enactment of a "Good Samaritan" provision would lead to even better response to a hazardous substance incident. It is our view that to encourage companies to respond to serious incidents in their local areas regardless of whether or not it is their product, companies' realistic fears of legal entanglements must be put to rest. The surest way of encouraging companies to participate in mutual aid is to enact legislation providing protection to the responding company from civil liability. This would benefit persons and the environment by promoting swift and effective

action from a nearby plant rather than extending the time before trained help from other sources can arrive on the scene.

Since CHEMTREC began in 1971, it has responded to 94,316 calls through September, 1979. Of those, 15,710 required assistance. Some 2,428 were non-transportation incidents (16%) and 12,742 involved transportation modes (84%). Of the transportation calls, 5,496 (43%) involved railroads; 5,463 (43%) were highway accidents; 226 (2%) were water-related; 1,270 (10%) were terminal operations; 120 occurred at piers; and 167 (1%) involved other forms of transport. Transportation incidents involving small quantities (less than 5 gallons) represented 45% of all spill reports during the first eight years of CHEMTREC's operation.

In an important new step, the CMA and the Department of Transportation recently formed an official information network. The agreement links two emergency response services together: the Chemical Transportation Emergency Center (CHEMTREC), set up and run as a public service by CMA; and the National Response Center (NRC), established by DOT and operated by the Coast Guard.

The agreement states that CHEMTREC will inform NRC promptly of significant chemical spill incidents. NRC will notify CHEMTREC when a caller needs information not available from NRC.

The National Transportation Safety Board has recognized the Chemical industry's efforts -- and stated recently in

Chemical and Engineering News that they are "aware of what it considers laudable safety programs initiated by the chemical industry."

D. EMERGENCY RESPONSE PERSONNEL ARE EXPERTS

Industry responds quickly to cleanup chemical spills. Companies know how to treat and neutralize their products. They keep their staffs constantly updated on safety and health techniques and all other aspects of dealing with chemical spill emergencies. CMA has sponsored 10 workshops to train emergency response personnel on how to handle hazardous material spills. More are planned for the future.

Industry's spill experts are so well trained that they are often called on to help train others. Some of their teaching duties include classes on hazards handling for the West Virginia State Police and Texas State Troopers, training programs for New Jersey firefighters and instruction for employees of the Environmental Protection Agency. In addition, CMA has joined with the Association of American Railroads and produced training films on the proper handling of hazardous materials for local fire departments.

E. COMPANY RESPONSE TEAMS

Most chemical companies maintain emergency response teams. They are on call around the clock to give advice and speed to the scene of transportation emergencies to help remedy problems.

1. THE UNION CARBIDE "HELP" PROGRAM

I would like to briefly describe Union Carbide's program called HELP. HELP is Union Carbide's system for providing emergency response whenever or wherever it can help prevent injury to individuals or the environment which could result from an accident involving its products. HELP has faced hundreds of emergency situations without a single injury. The heart of the HELP system is a volunteer group of highly trained and committed Union Carbide employees who respond to emergency calls. The information given to the HELP operator by someone who wants help includes:

- name, location and telephone number where caller can be reached;
- name of the product involved;
- specific location of the damaged container;
- type of container (drum, tank car, tank truck, other);
- description of conditions involved at incident scene; and
- report of any injuries and needs for medical assistance.

Once the information has gone to the HELP coordinator, he will know which of 64 plant and 110 specialty contacts - including chemists, engineers, medical doctors, and other trained people inside or outside of Union Carbide - need to be called for advice and assistance.

The first phase of emergency response is the quick analysis of the hazards present in the situation and immediate advice to

those in charge at the scene. In most land spills, these corrective actions are sufficient to contain the danger. Yet there are cases where a spilled hazardous chemical will contaminate a body of water. HELP personnel are prepared to handle both kinds of spills, and they have ready access to appropriate neutralizing agents and special equipment--including water containment devices. The third phase of emergency response is on-scene repairs. And here, the HELP people must be intimately familiar with the design characteristics of chemical transportation equipment. The on-site cleanup is the last phase of emergency response. And because many hazardous products have latent environmental effects, it is one that cannot be taken casually. The HELP program offers advice to local cleanup personnel. And such advice may cover the entire spectrum from "no action needed" to "remove the soil from the entire area."

The members of Union Carbide's team have safely handled hundreds of chemical incidents since 1964, thus providing invaluable assistance to community officials all over the country. HELP team members have had from 10 to 35 years experience at Union Carbide, most of it in the Distribution and Operating Departments. During their time with the company they have accumulated wide experience in handling a variety of hazardous chemicals and transportation equipment. This makes full use of their judgement, initiative, and experience.

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2. THE DOW CHEMICAL EMERGENCY RESPONSE PROGRAM (E/R)

The Dow Chemical Company also has a very valuable emergency response program. At any time, day or night, when an emergency call is placed on the Dow Emergency Response (E/R) System, advice is given immediately for spills, leaks, fires or exposures as soon as the basic facts of the occurrence are known. If personal injuries or exposures are involved, the caller is placed immediately in contact with Dow Medical personnel for appropriate assistance. The incident is then placed in the hands of knowledgeable technical personnel, who, working with the local E/R coordinator, can provide the advice or assistance needed. The incident then is followed through to its conclusion. Where the situation warrants it, a team of experts can be on the scene within hours utilizing company or chartered aircraft.

To assure availability of assistance, information on the Dow E/R System has been provided to all Dow carriers. An E/R phone number is placed on each bill of lading.

Dow had a system such as its E/R System for a number of years prior to participating in the establishment of CHEMTREC in 1971.

Dow maintains E/R Centers in California, Louisiana, Michigan, and Texas, staffed and operated by its major production divisions. In any incident, a wealth of technical expertise may be applied in areas such as trace analysis,

toxicology, industrial hygiene and medical. Safety of all concerned is kept as the uppermost consideration.

F. CHEMICAL INDUSTRY PROGRAMS RELATED TO SPILL CONTROL

The Chemical Manufacturers Association encourages all chemical manufacturing companies to promote effective loss prevention programs, and spill prevention and control programs. I have already described CHEMTREC's information network. But the chemical industry has many other ongoing programs related to chemical safety and response to spill emergencies. Major efforts include the following:

- Individual emergency response programs of CMA member companies;
- On-plant safety training programs; and
- Chemical transportation safety programs.

Any company which has experienced unusual product losses, creates a serious problem in insurance procurement for all companies because insurance rates and insurance availability are adversely affected. Proper handling of chemical products is a strong economic incentive.

Although the effects of a spill may differ in transportation situations from that of on-plant accidents, the potential outcome can be defined for a given set of circumstances. Therefore, specific definition, projection, and assessment of hazard potentials are essential for each situation. Failure to recognize problems and act accordingly can result in serious operational, legal, and economic impact.

An effective chemical safety program must incorporate specific considerations at each stage of the chemical's life: from manufacturing to transportation and distribution. The following on-plant considerations are an integral part of such a program:

- The nature of raw, intermediate, and end products being handled;
- Plant waste streams and systems;
- Plant treatment and control facilities;
- External sewerage and treatment systems;
- The nature and use of the receiving waters;
- Spill containment and retention facilities (SPCC Plans);
- Training in on- and off-plant response to chemical emergencies.

Additional factors must be considered when managing an effective chemical transportation distribution program.

- Condition of the carrier;
- Packaging and labeling requirements;
- Handling requirements;
- Carrier training;
- Shipper supervision;
- Insurance programs;
- Adequate hazard and emergency response information.

Source of accidental spills are widely variable. No two plants, or transportation incidents are alike: each must be individually reviewed in regard to spill potential and related

programs. Spills may potentially affect municipal sewerage, receiving waters, public areas, and highways.

Containment of a spill is the first step to control its effects. Temporary measures alleviate the need for decisions under emergency conditions, since, in many cases, the spill is best coped with in its identifiable form. The most appropriate containment method is usually decided on a case by case basis but the following methods can be effective:

- Diking - similar to that used for tank farms. However, diked areas must be constructed so as to preclude percolation to ground waters;
- Diversion--via pumping or gravity flow to a temporary storage area. Automatic sewer cut-offs with appropriate pumping facilities may be useful;
- The effect of a spilled material can often be negated or minimized by countermeasures. They include:
 1. Dilution with water;
 2. Neutralization;
 3. Addition of reactive materials;
 4. Adding oxidizing agents;
 5. Other appropriate steps depending on the material involved.

Potential pollution of water, air, or soil must be considered. Normally, disposal of spilled material can be accomplished by:

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- Biological or chemical treatment;
- Incineration, landfill;
- Deep-well disposal.

In some cases it may be economically beneficial to recover the spilled material for reprocessing or to sell it as raw material for another use.

Since most on-plant spills are caused by mechanical failure and/or personnel error, prevention can be maximized by:

- Sound basic design;
- Training of operating, technical, and maintenance personnel;
- Strict job responsibility;
- Sound process control, alarm, and monitoring systems;
- Proper maintenance of equipment and facilities.

Managing a chemical safety program incorporates all of the previously discussed techniques, and three other critical factors.

- Communications, cooperation and coordinated efforts are essential to a successful spill prevention program;
- Crisis failures can be avoided by timely response and frequent training;
- Design recommendations are important in determining alternative solutions and resolving judgement differences, for effective spill prevention.

III. CMA'S EVALUATION OF EPA'S 1977-1979 SPILL DATA

A. BACKGROUND

CMA has evaluated EPA's two year regional spill data using specific knowledge of the chemical substances involved and the potential threat to human health and environment based on the quantity spilled. The purpose of the evaluation was to determine how many of the approximately 3,300 spills in the two year period were actually serious.

We have analyzed the spill data using EPA's 311 list of hazardous chemicals and the known toxicological properties of the substances involved.

We realize that the documentation of EPA's spill reports is not as firm as EPA would like, however, their data is used to support their position. We have evaluated their data on the basis of known toxicological effects and potentially serious environmental effects. Our evaluation is conservative, but all incidents were counted as serious which might under any circumstances produce a serious effect. The summary of the results show that out of the 3,254 spills reported to EPA in the 1977-79 period, only 29% could have potentially produced serious effects. Moreover, it is not certain that even these (the 29%) incidents did, in fact, produce serious effects.

The facts do not support the contention that hazardous substance spills are so great a problem that new spill legislation is needed.

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Assumptions

Listed below are the basic assumptions used to rate the hazard or seriousness of each spill:

- All PCB spills were considered serious;
- Spills of paints were not considered serious;
- Quantity was a necessary item to evaluate the seriousness of each spill (except when serious effects were noted in the "comments").
- Spills were assumed to have reached an environmental medium (not cleaned up).
- The spill was considered potentially serious if the substance involved was:
 1. explosive
 2. fuming
 3. corrosive
 4. flammable
 5. high acute or chronic toxicity
- The spill was considered potentially serious if any of the following could have been adversely affected:
 1. human health
 2. vegetation
 3. groundwater
 4. surface water
 5. wildlife

B. CHARTS (See following pages)

SUMMARY SHEET OF EPA
SPILL DATA 1977-1979

<u>Environmental Medium Affected</u>	<u>Number of Potentially Ser. Spills</u>	<u>% of all Reported Spills in 1977-1979</u>
Air	24	0.7%
Land	374	11%
Water	361	11%
Unknown	189	6%
Total	<u>948</u>	<u>29%</u>

Potentially Serious Spill Incidents
Reported to EPA in 1977-1978

	<u>Air</u>	<u>Land</u>	<u>Water</u>	<u>Unknown if Envir. Med. Affected</u>	<u>Total</u>
Region I	-	7	16	7	30
Region II	1	18	16	6	41
Region III	-	2	29	13	44
Region IV	2	7	46	35	90
Region V	4	30	27	3	64
Region VI	2	21	9	1	33
Region VII	-	13	1	-	14
Region VIII	-	9	6	-	15
Region IX	-	24	6	3	33
Region X	-	3	2	2	7
Total	9	134	158	70	371

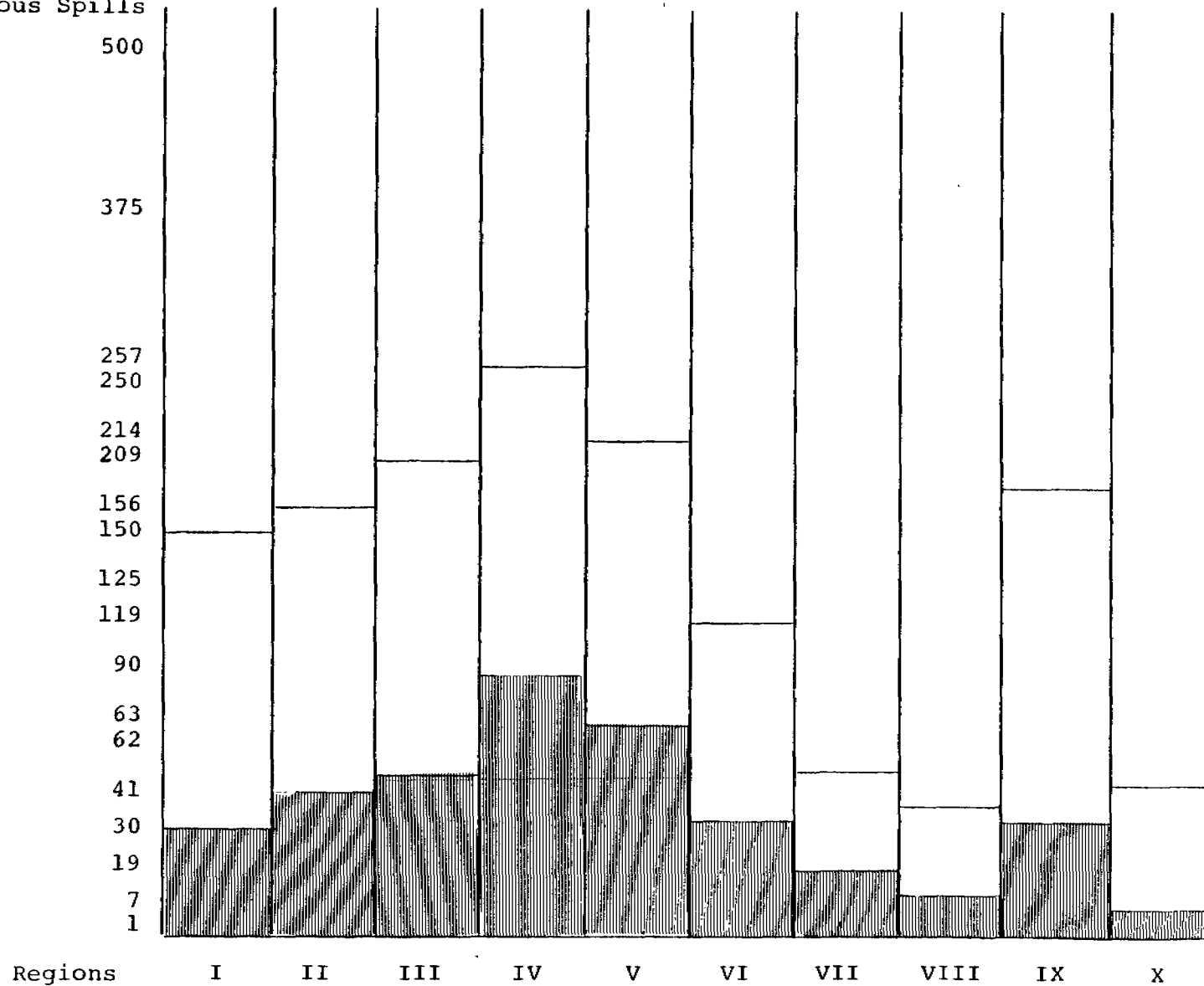
Potentially Serious Spill Incidents
Reported to EPA in 1978-1979

	<u>Air</u>	<u>Land</u>	<u>Water</u>	<u>Unknown if Envir. Med. Affected</u>	<u>Total</u>
Region I	2	19	12	3	36
Region II	3	31	44	-	78
Region III	1	-	22	31	54
Region IV	-	7	49	78	134
Region V	-	62	31	2	95
Region VI	3	25	19	-	47
Region VII	2	26	3	1	32
Region VIII	1	29	5	-	35
Region IX	-	35	14	2	51
Region X	3	6	4	2	15
Total	15	240	203	119	577

Number of Spill Incidents By Region - 1977-78

Tot. # Spills
Reported
Tot. # Potent.
Serious Spills

Percent Serious
Spills by Region



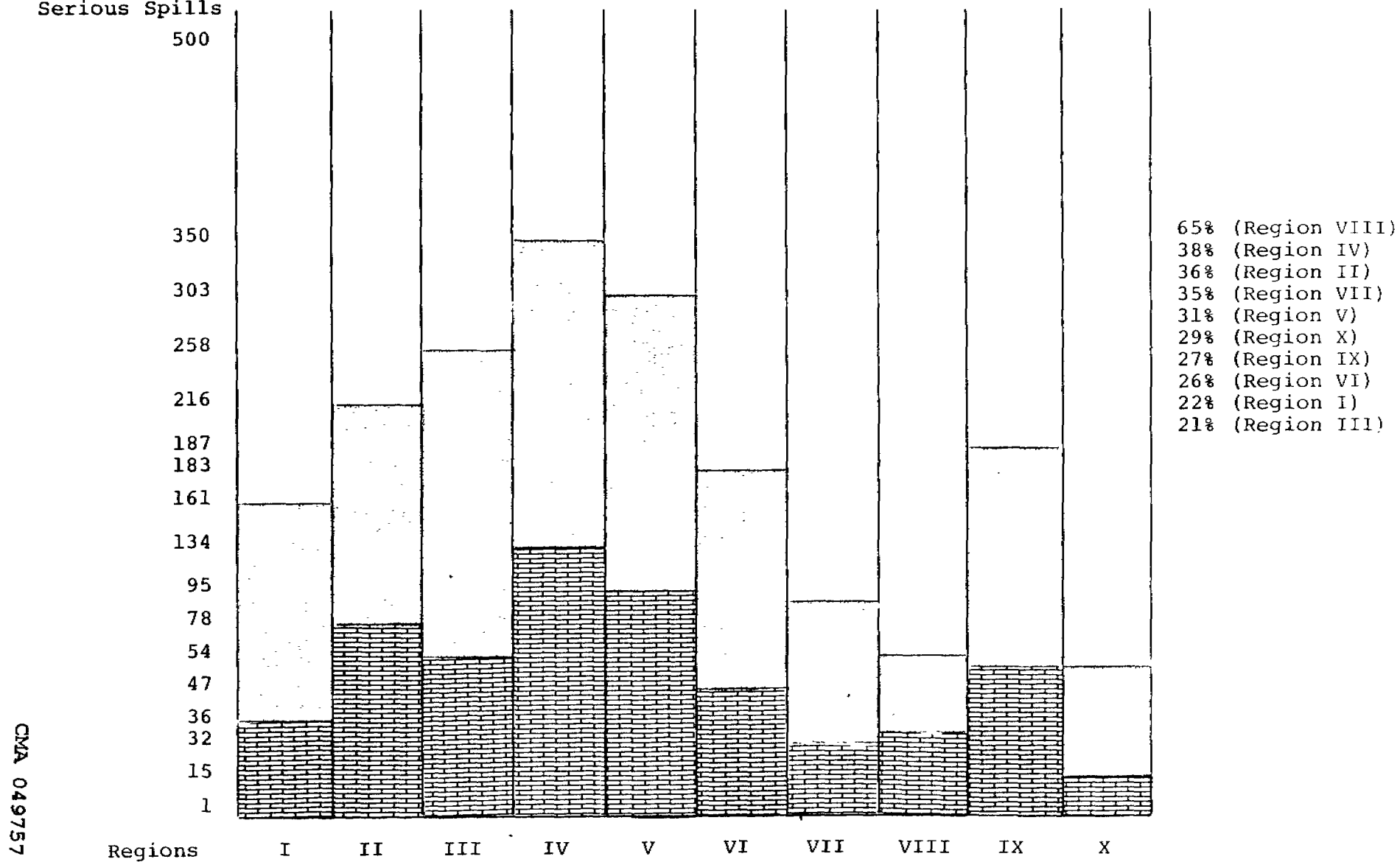
42% (Region VIII)
40% (Region VII)
35% (Region IV)
29% (Region V)
28% (Region VI)
26% (Region II)
21% (Region III)
20% (Regions I
& IX)
16% (Region X)

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Number of Spill Incidents By Region - 1978-79

Tot. # Spills
Reported
Tot. # Potent.
Serious Spills

Percent Serious
Spills by Region



SUMMARY

In summary, CMA believes that existing law offers an appropriate mechanism for treating spills of chemical substances. An Ultrafund for such spills is not necessary since Sections 311 and 504 of the Clean Water Act, coupled with long-standing tort law, provide a comprehensive approach that can adequately handle spill problems.

We support full funding of Sections 311 and 504 so that the spills program can be properly carried out. Enactment of Section 2 of the Roberts-Breaux-de la Garza bill (H.R. 5338) would be a major step towards full utilization of Section 504, and we endorse it.

In addition, the chemical industry is effectively responding to spills of hazardous substances--and is working to reduce such spills in the future. The CHEMTREC information network, individual company response programs, and chemical transportation safety programs are all a part of this ongoing effort.

CMA also believes that new legislation is needed to address old "orphan" dumpsite problems. We support the creation of a Federal fund to provide for emergency assistance and containment of those sites which are presenting a hazard.

ATTACHMENT A

STAUFFER EMERGENCY ASSISTANCE POLICY:

Stauffer Chemical Company also established an Emergency Assistance policy under which technical product assistance will be provided to public safety agencies, carriers or others if an accident occurs involving a chemical product manufactured by Stauffer. This policy also provides that trained Stauffer employees will respond to incidents arising from the chemical products of other manufacturers, if Stauffer has the expertise in that product and if asked for assistance. In addition, Stauffer is an active participant in CHLOREP, the Pesticide Safety Team Network, and the vinyl chloride monomer mutual assistance programs. This Emergency Assistance policy is part of Stauffer's long-standing effort to protect employees and the public against the potential hazards arising from the manufacture, distribution and use of its products.

Under this policy, a designated emergency assistance team is authorized and directed to rapidly respond to requests for technical product assistance in reducing or eliminating any dangers resulting from an incident, including, in appropriate cases, on-site assistance. The written plan establishes one 24-hour central telephone to which all incoming incident calls enter the Stauffer Emergency Response Network. Based on the product name and location of the incident, the Telephone Central

Security officer selects the emergency assistance team that will be responsible for handling the problem.

The head of the contacted emergency assistance team, or "CHEMTREC Supervisor" as he is known, receives from Telephone Central certain basic information including the location of the incident, the product involved and a call back number at the scene. The Supervisor establishes contact with CHEMTREC in Washington if the alert did not originate from them. The Supervisor also immediately establishes contact with the scene, and he is responsible for recommending any additional action that should be taken to bring the situation under control. The CHEMTREC Supervisor's action could include:

- Detailed telephone recommendations on how to handle the problem;
- Dispatching of qualified company personnel to the scene of the incident;
- Providing direct contact with Stauffer's 24-hour medical/toxicological response network if medical or toxicological information is necessary;
- Reminding responsible personnel at the scene to make timely contact with the appropriate governmental agencies since the incident may require reporting of several regulatory groups.

Finally, after technical assistance has been given by the CHEMTREC Supervisor, CHEMTREC in Washington is recontacted to

to advise what action has been taken by Stauffer as well as the phone number and name of the responsible "CHEMTREC Supervisor."

Chemical Manufacturers Association's Review
of EPA's "Everybody's Problem: Hazardous Waste"

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EPA recently published a booklet entitled "Everybody's Problem: Hazardous Waste" (SW 826).

CMA recognizes the need for the general public's awareness of hazardous waste disposal problems. However, we do not support EPA's unjustified attempt to alarm the public. In this instance, EPA's publication is misleading and inflammatory.

EPA states on page 8 of the booklet that they conducted a study on abandoned hazardous waste sites and estimated that there were between 2,000 - 32,000 sites and that the total cost to cleanup such sites would be \$44 billion.

The study which they are referring to was discredited in Congressman Eckhardt's Subcommittee Report, House Report No. 96-IFC-33, October 1979:

While this report has many methodological flaws, the inadequacy of its fundamental data base alone is enough to discredit the study. The estimate of the number of sites and the degree of hazard that they pose is little better than pure guesswork and thus the clean up estimates are unreliable.

The 44 billion dollar estimate appears on page 37-B of the Hart report. The study was contracted by the Office of Solid Waste #68-01-5063. The contractor used 232 actual cases, and selected 24 of those for site visits.

Based on the 232 cases, the study extrapolates the number of potential abandoned hazardous waste disposal sites to 32,254. They estimate that each site will cost between \$3.6 million to \$25.9 million to cleanup.

CMA has contacted contractors and engineering/geology departments to obtain estimates on disposal site cleanup operations. Extensive cleanup involves the installation of clay liners, barrier walls, ditch and trench systems and leachate collection and treatment systems. Such activities cost, on an average, \$1 million per disposal site.

Thirty-three state environmental protection agencies reported to CMA in February 1980 the preliminary results of their inventories which identify 431 potentially hazardous sites and 175 known orphans. Assuming the state inventories will increase by at least 35%, the cost range to cleanup and correct 175 to 400 failing abandoned sites would be in the range of 200-500 million dollars, not 44 billion.

CMA's cost evaluation is based upon industrial cost data, state agency cost estimates and actual costs for the Love Canal and the recent cost estimate for the Lipari site. Although costs of \$20 to \$30 million could be incurred for waste removal and reburial, this degree of action is unlikely to occur in most cases. An average cost per site will more likely be \$1 to \$2 million, an order of magnitude lower than EPA's estimate.

On page 10 of the booklet, EPA states that the Agency is attempting to identify abandoned or uncontrolled dumpsites "which the Agency estimates may be as many as 2,000."

The Agency cannot seem to decide if there are 2,000 or 32,000 sites which are abandoned and hazardous. In any case, Barbara Blum has called for quick action on disposal sites

with financially viable owners rather than investigating abandoned disposal sites which may be "imminent hazards."

emphasis
added

Clearly, the Agency must improve its capability to deal with hazardous waste sites and spills. We need to locate, prioritize, investigate, and respond to a larger number of sites....Major areas requiring attention include response activities under Section 311 of the Clean Water Act, hazardous waste enforcement, the development of data in support of pending Superfund legislation, a resource-efficient program to locate potential sites, and Congressional and media programs to highlight the achievements and needs of the Agency's hazardous waste program....Particular emphasis will be given to the number of enforcement cases filed or scheduled to be filed; your efforts to integrate your 311, enforcement, and program effort; and your use of Section 311 response authority and funds at appropriate hazardous waste sites.

If as Barbara Blum states in the same memo, dated November 27, 1979, "the bottom line is the number of cases filed," then the Agency cannot be searching for abandoned disposal sites. And their statements concerning dangerous sites are contradictory; on page 10 they state, "Unfortunately the owners of hazardous waste disposal sites often cannot be found," and yet all their investigative activities are focusing on enforcement actions and case developments which have readily identifiable, financially solvent owners.

It would appear that EPA's "solution" does not fit their own definition of the problem. If they were really concerned about abandoned disposal sites, they would dedicate their efforts toward finding abandoned sites which may be posing an "imminent hazard."

EPA states on page 15 that 90% of the hazardous waste in the United States is disposed of by environmentally unsound methods. This conclusion is based upon CMA's Surface Impoundment and Landfill Survey which showed that a high percentage of facilities failed to meet the proposed RCRA siting and design standards. However, failure to meet the proposed siting and design standards does not constitute environmentally unsound disposal.

EPA believes that "the cheapest alternative of all is the 'midnight dumper' (page 21 of the booklet). Whether or not this is true, it is obvious from the Eckhardt Subcommittee Survey of the chemical industry, that 94% of all the waste generated in the last 30 years is located on generator property. The chemical industry knows where 99% of its waste has gone over that thirty year period.

CMA surveyed the chemical companies who responded to Eckhardt's questionnaire again. We asked about current practices regarding protective and corrective actions on landfills, related expenditures, and monitoring. The results of this survey showed that \$179,000,000 has been spent on approximately 300 sites. Those sites which are being monitored contain over 50% of the waste generated over the last 30 years. It was apparent the chemical industry is deeply involved in programs to correct and maintain the integrity of their disposal sites and prioritize problem sites.

EPA initially defined the real problem as abandoned waste disposal sites, and CMA agrees. To gain a better understanding of the magnitude and severity of the "orphan" disposal site problem, CMA surveyed the agencies of 48 states.

We found that 33 states have inventories in progress. Their preliminary findings show 431 potentially hazardous sites with financially viable owners, and they have found 174 "orphans" (February 1980). They have identified 4,196 disposal sites (total) in their preliminary results.

These findings do not support the Hart study, which estimated 32,000 sites, nor do they support Barbara Blum's December 1979 estimate of 2,000 "problem" sites. In addition, EPA itself has only 191 sites under active or planned enforcement action. Upon careful consideration, these findings indicate an order of magnitude much lower than EPA's estimate.

EPA says that dumpsites are "like undesirable neighbors such as prisons, highways, airports, and sewage treatment plants," page 35. "No one denies the need for them, but no one wants them nearby."

There has been an unprecedented coverage of the Love Canal site in New York and many alarming articles in newspapers and magazines about other disposal sites. Citizens are frightened and concerned. "These fears may not be based upon the community's own experiences, but rather upon published accounts of past incidents in other locations," page 35. Such sensationalistic press coverage and inflated descriptions of the magnitude of the problem will not help EPA.

Siting new disposal facilities is a serious problem. The public is now so fearful of "ticking time bombs"¹ and future Love Canals that communities are strongly resisting the location of disposal sites in their neighborhoods.

EPA states on page 36, that "we have found the sources of hazardous waste and they are us." We must accept the responsibility of working towards solutions of hazardous waste problems.

EPA's efforts to arouse citizen concern about "untold hazards" of dumpsites are counterproductive to their real need. Rather than alarming the general public and distorting the facts, EPA could quietly identify the serious problem sites which are unattended and need quick action.

More importantly, we all need to accept proper waste disposal facilities as necessary to our way of life. Much of the resistance to new disposal sites can be directly attributed to EPA's attempts "to highlight the achievements and needs of the Agency's hazardous waste program through Congress and media programs." Gross exaggeration of the scope of the problem, fomenting malice and distrust towards one industry, and extensive media coverage will not help EPA highlight their achievements.

¹"Everybody's Problem: Hazardous Waste," p. 11