

The Federal Superfund Program in the Great Lakes Region - a Background Paper

Background Papers Addressing the Federal
"Superfund" Process and Hazardous Waste Management
Efforts in the Great Lakes Region.

GREAT LAKES COMMISSION STAFF
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PREFACE

The Great Lakes Commission staff is pleased to present these background papers addressing the federal "Superfund" process and hazardous waste management efforts in the Great Lakes region. The papers represent an update and expansion of papers previously prepared at the request of the Natural Resources Management Committee. Commissioners, advisors and other interested individuals may find this document of interest; particularly those attending the hazardous waste management tour held in conjunction with the 1984 Semi-Annual Meeting of the Great Lakes Commission.

James Fish Executive Director

TABLE OF CONTENTS

	P	age
i.	Preface	1
11.	The Superfund Program (A discussion of program elements, Great Lakes-related activities and potential issues for GLC consideration), April 1983	
	Supporting Tables	
	 The Superfund Decision Major Responsibilities of States and £PA Under State Superfund and Cooperative Agreements Number of Great Lakes Superfund Sites Identified List of Hazardous Waste Sites in the Great Lakes States Under Superfund December 1982 	6 9 10
111.	Superfund Update: The Status of CERCLA After its First Three Years. February 1984	17 19 21 22 24 25 25
	 I. PA Summar, of Removal Actions at Hazardous Waste Sites in the Great Lakes States Under Superfund Law	31

THE "SUPERFUND" PROGRAM

(A Discussion of program elements, Great Lakes-related activities and potential issues for GLC consideration)

INTRODUCTION

This discussion paper has been prepared in response to a request from the Subcommittee on Land and Air of the GLC Natural Resources Management Committee. Following a review of hazardous waste management issues identified by the Great Lakes states, the Subcommittee decided to focus its attention on the adequacy of federal funding for clean-up of identified hazardous waste dump sites in the Great Lakes basin. In this paper, we provide a brief introduction to the "Superfund" program; examine the nature of state participation in the program; identify all priority dumpsites in the Great Lakes states; and suggest several specific actions the Great Lakes Commission may wish to pursue. This information is intended to provide a basis for discussion by the Commission's Natural Resources Management Committee.

THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 (PL 510) - AN OVERVIEW

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), commonly known as Superfund, was passed with the intent "to provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites." As such, the law constitutes a distinct departure from earlier environmental legislation in several respects.

The Superfund legislation is comparatively more flexible than the regulatory statutes passed over the last decade. It features little administrative apparatus beyond the requirements associated with development of a National Contingency Plan, the cornerstone of the legislation. The legal principles of liability are combined with an assortment of authorized actions: administrative orders and injunctive suits to control or clean up water and lawsuits to recover costs when the federal government undertakes the cleanup.

Superfund also differs from preceding environmental legislation, such as the Resource Conservation and Recovery Act, in that it is not forward looking, but focuses primarily on past and present disposal practices. As a consequence, the issue of liability for past hazardous waste handling practices is central to Superfund. Section 107(a) of the Act imposes liability on four groups: 1) present owners and operators of disposal facilities; 2) those who owned or operated disposal sites at the time of disposal; 3) those who arranged for disposal or treatment at, or transport to, a disposal or treatment facility; and 4) those who accepted hazardous wastes for transport to disposal sites. The issue of liability has been raised repeatedly since program inception, as the USEPA and the Department of Justice have moved forward on clean-up operations, settlements, negotiated agreements and lawsuits to ensure cleanup of problem disposal sites.

In sum, the varied actions available to the federal government under Superfund legislation and the discretion inherent in cleanup approaches at individual sites, affords significant flexibility in program implementation. As will be discussed, the program also provides for substantial cooperation among federal, state and local governmental units in addressing clean-up of designated disposal sites.

The emergency response and remedial clean-up activities mandated in the Superfund legislation are made possible via the Hazardous Substance Response Fund established by Section 221 of the Act. The trust fund, collected through taxes paid by manufacturers, producers, and exporters and importers of oil, and 42 chemical substances, will provide \$1.6 billion over the five-year life of the legislation. It can be used to provide both emergency and long-term cleanup of releases of hazardous substances and inactive waste sites.

The National Contingency Plan (NCP) is the mechanism by which the trust fund monies are directed to priority problem areas. The first plan was developed by the federal government in 1968 under the Clean Water Act to respond to emergencies caused by oil spills and releases of hazardous substances in navigable waters. By Executive Order (August 14, 1981), President Reagan directed the USEPA to revise the National Contingency Plan' to contain the implementing procedures for the coordination of response actions to releases of hazardous substances into the enviornment." The revised plan was prepared in March 1981 and a final plan issued in July 1982.

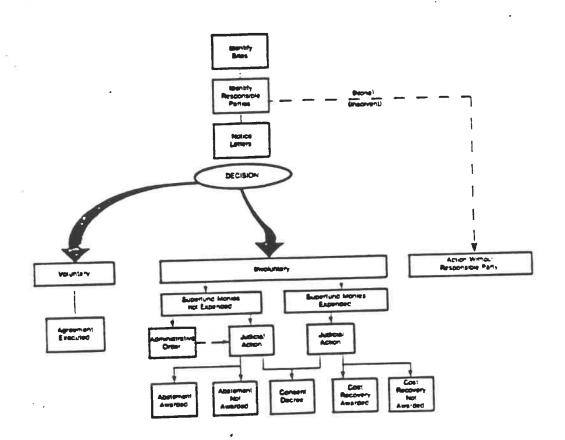
Simply stated, the Plan identifies a methodology for determining when, where and how Superfund monies will be allocated. The NCP gives USEPA's on-site coordinators guidance in preparing and carrying out a response. For example, by distinguishing among immediate removals, planned removals and remedial responses, the NCP establishes a framework for determining allowable Superfund-financed responses. The NCP also provides groups like the USEPA Environmental Response Team and the Office of Research and Development with up-to-date information on the most cost-effective clean-up methodologies and equipment.

Recognizing the need for intergovernmental cooperation in the clean-up effort, the Plan details the responsibilities of the involved federal, state and local units of government; encourages their coordination in response efforts; permits reimbursement of state and local governments for reasonable costs, and authorizes the federal government to undertake cleanup when the responsible party or the state cannot or will not do so.

In conjunction with the NCP, the USEPA is compiling a prioritized national list of problem hazardous waste sites nominated by the states. In the fall of 1981, 115 sites were selected to be the initial recipients of Superfund monies. In late 1982, the USEPA added to the list; 418 "Superfund" sites have now been identified throughout the nation.

Generating the National Priorities List (NPL) is only the first step in the Superfund decision process (see Table I), but it is a most critical one. Section 105 (8)(b) of the Superfund law states that the NPL is to be developed for the purpose of taking response actions. USEPA issued a guidance for establishing the NPL on June 28, 1982, but not until December 20, 1982 did the EPA release a list of the 418 most dangerous hazardous waste sites.

THE SUPERFUND DECISION



The law had required USEPA to make such a list some 180 days after the law was signed into being, but former Administrator Ann M. Burford had only issued an interim list of 160 sites requiring cleanup prior to the published listing.

The flow of the activites necessary to establish the NPL is:

- identification of candidate sites;
- investigation of those sites by the State/USEPA with notification to local governments;
- application of the Hazard Ranking System (developed for USEPA by Mitre Corp) to generate a score for the site;
- State submission of the site for the NPL to USEPA;
- Regional USEPA submissions to USEPA headquarters;
- USEPA headquarter compilation of a first list;
- proposal of the NPL in the Federal Register;
- review comments; and
- publication of final NPL in the Federal Register.

The primary responsibility for the nomination, scoring, and documention of the score rests with the States. The EPA regional offices are responsible for providing technical assistance to the states for site scoring activities to assure a consistent approach to applying the Hazard Ranking System. The USEPA regional offices are also responsible for providing full information to the Office of Solid Waste and Emergency Response pertaining to negotiations with responsible parties.

USEPA Headequarters is responsible for providing overall guidance for the site scoring and ranking process along with performing final quality assurance reviews.

USEPA planned to update the list on a quarterly basis, but recent controversy has slowed USEPA response to Superfund activities. When the list is updated, USEPA will add new sites that become eligible on the basis of Hazard Ranking System scores and will remove presently listed sites if:

- o USEPA, in consultation with the appropriate state, determines that the responsible parties have completed cleanup and no publicly funded response actions are required;
- o USEPA determines that no further cost-effective response actions can be taken at the site; and
- o USEPA determines, based on a feasibility study, that no remedial actions should be undertaken at the site. USEPA will consider the nature and severity of the problems, potential costs of cleanup, and available funds in making such decisions.

All sites on the NPL are to be treated as candidates eligible for response and/or enforcement. (Exclusion from the list does not preclude enforcement actions under the Superfund law). The sites that will receive the highest priority for response funding will be those where the State has provided cost-sharing and other assurances and where enforcement actions do not appear promising. Priorities for funding within this group will be based upon risks to public health and the environment, as measured by the Hazard Ranking System scores and other available information, and on a case-by-case evaluation of economic, engineering and environmental considerations.

While Superfund permits flexibility in site clean-up strategies, the law is specific in terms of site eligibility. Superfund may only be used to respond to a release or substantial threat of release into the environment [Section 104(a)(1)]. If rusting drums on a site are basically sound, monies may not become legally available until the threat is "substantial." furthermore, Superfund authorizes responses to only two broad categories of substances: 1) hazardous substances already designated under RCRA and the Clean Water Act; and 2) substances which are not designated but which may present an "imminent and substantial danger" to the public health.

Superfund authorizes responses only to releases or threats of releases from a vessel or disposal facility. However, these terms are broadly defined, and are generally construed to permit qualification of a number of sources. Superfund monies cannot be used if a responsible party is taking appropriate action in response to a release, nor can monies be used to restore damaged natural resources if the damage and the release that caused it occurred wholly before enactment of Superfund [Section 111(d)(1)].

STATE PARTICIPATION UNDER SUPERFUND

As stated earlier, federal-state-local cooperation is an integral component of the Superfund legislation. The two documents that are used to define USEPA and state roles in the administrative and technical complexities of a clean-up effort are the cooperative agreement and the State Superfund contract. The cooperative agreement is used when the State takes the lead role, while the State Superfund contract is used when USEPA initiates the clean-up effort. Table II presents the responsibilities of the States and USEPA under these two instruments.

If a state desires the lead management role for remedial planning and clean-up implementation, the state must submit an application for a cooperative agreement. A cooperative agreement is much like a grant, in that the money is transferred from USEPA to the State. The key distinction is that there is more active USEPA involvement in a cooperative agreement than under a grant.

The cooperative agreement application contains the state's work plan, schedule, project budget, and the various assurances required under the Superfund law. The work plan and schedule set forth specific details on how and in what time frame the State will accomplish the remedial action. The budget shows the cost of each major activity on the site, and breaks down the expenditures by category. The assurances required by Section $104\ (c)(3)$ of CERCLA are that the State will share in the cost of the action; that approved capacity is available for any necessary off-site treatment, storage, or disposal, and that the State will assume responsibility for all future maintenance of the response action.

TABLE II

MAJOR RESPONSIBILITIES OF STATES AND EPA UNDER STATE SUPERFUND CONTRACTS
AND COOPERATIVE AGREEMENTS

			RATIVE EMENT	SUPERI CONTR	
RESP	PONSIBILITIES	EPA	STATE	EPA	STATE
1.	Appoint project officer to coordiante and lead activities		•	•	
	Handle all contractual matters relating to the project		•	•	
3.	Develop scope of work including cost estimates and schedules	•	•	•	•
4.	Oversee and direct all project work		•	•	
5.	Review and comment on work plan and cost and time estimates	•			•
6.	Develop and implement community relations plan		•	101	
7.	Prepare and submit reports on progress and expenditures		•		
8.	Make statutorially require assurances	d	•		
9.	Prepare site safety plan	•	•	•	
10.	Assure sampling and analysis quality		•	•	

USEPA reviews the application upon receipt, drafts special conditions to the award for those aspects not adequately addressed, and then offers the award to the State.

If the State accepts the award, USEPA sets up a letter of credit account in the amount of the award. The State may draw down the account to meet expenses from contractors or in-house resources. The State has responsibilities to ensure that the activities specified in the work plan are carried out according to schedule and within budget.

USEPA's main responsibility is to monitor progress by the State and to select the appropriate remedial action to be taken at the site after consulting with that State.

If USEPA decides to take the lead role in remediation of a site, the work is done by an USEPA contractor or through the Corps of Engineers. Consequently, there is no transfer of funds to the State. In February 1982, a compromise was reached between the EPA and the Corps that would permit USEPA retention of overall responsibility (up-front work from site identification through recommendation of remedial processes) and the Corps would manage all design and construction/clean-up operations based on USEPA's recommendations. To date, the cooperative agreement approach has been employed much more often than the State Superfund contract approach.

HAZARDOUS WASTE CLEAN-UP NEEDS - NATIONAL OVERVIEW AND GREAT LAKES PERSPECTIVES

Each year, opproximately 50 million tons of hazardous wastes are disposed of in the United States. Presently, an estimated 300,000 industrial operations generate these wastes. For decades there was little or no state or federal regulation or accountability for hazardous waste disposal practices. This legacy has resulted in roughly 30-40,000 abandoned (i.e., uncontrolled) dump sites where the owners have become insolvent, unable to be located, or where liability simply cannot be established.

The USEPA and the various states have identified and initiated some level of investigation on 14,000 sites nationwide. National clean-up costs are estimated to range from \$3.6 million to \$25.5 million per site with the total nationwide estimated as high as \$40 billion. For example, Michigan alone estimates it will require as much as \$70 million just to determine the extent of groundwater contamination at 640 problem sites. These figures are crude estimates but do provide a sense of the magnitude of financial resources required.

The USEPA has estimated that monies currently available in the Hazardous Substance Response Fund (\$1.6 billion) will permit completion of remedial clean-up at 170 of the NPL sites. These estimates assume no cost recovery from responsible firms. Section 107 of the Superfund law compels responsible parties to reimburse the federal government for any Superfund monies used to perform removal or remedial activities. This section also permits USEPA to seek damages up to three times the amount spent under the Superfund Program. A guidance document on Section 107 cost recovery action was supposed to have been issued in late September but has been held up by the dispute between former EPA General Counsel Robert Perry and former Assistant Administrator Rita Lavelle over the issue of whether a legal officer or hazardous waste program representative should represent the Agency in cost recovery settlement negotiations. Former USEPA Administrator Burford pursued a policy of lawsuits to obtain action rather than quickly injecting funds into the clean-up effort, thereby extending the longevity of available funds.

Preliminary assessment of the 14,000 potential uncontrolled hazardous waste sites listed in EPA's Emergency and Remedial Response Information System (ERRIS) is the highest priority for \$10 million in grants awarded to states under the Agency's FY 1983 appropriation. Other priorities for the funds

include site inspections to gather information to score sites for clean-up priority under Superfund, detailed site investigations to gain necessary data before remedial action feasibility studies begin, and for searching out responsible parties.

The FY 1983 HUD and Independent Agencies appropriations measure (P.L. 97-272) gave EPA \$10 million from the Superfund program to carry out the hazardous waste site inventory authorized under Section 3012 of RCRA as a "one-time, non-recurring" appropriation. EPA is advised by the language to allocate tax funds as expeditiously as possible.

Allotment of the \$10 million is proportional to the number of sites included for each state in the inventory of 14,000 sites. Any state with more than 20 sites in the inventory is entitled to a minimum allocation of \$25,000.

Although the statute authorizes reimbursement to states for assessment work performed prior to enactment of Section 3012, the 1980 amendments to RCRA, will not use the \$10 million to do so. However, states are required to provide cost-share funding to match grant funds. The grants cannot be used to meet state cost sharers required for remedial action.

In reviewing applications for financial assistance, USEPA considers whether the application was compiled in accordance with agency financial assistance rules, whether achievement of the proposed activities is possible and whether the activities overlap with ongoing state or federal activities. USEPA also considers the applicant's past performance, program authority, organization, resources and procedures.

GREAT LAKES STATES

The clean-up strategies and funding mechanisms associated with the Superfund program have a pronounced impact upon the Great Lakes region. Six of the eight Great Lakes states rank in the top ten in the nation in terms of volume of hazardous waste generation. As evidenced in Table III, four of the states are in the top ten (and 6 in the top 25) in terms of the size of the grants awarded for the aforementioned inventory efforts. Final allotments found the Great Lakes states receiving \$2.949 million, or 29.5% of the total grants available nationwide. In those states, 4,542 sites were identified, comprising approximately 32.4% of all sites identified nationwide. The inventory funds, allocated February 7, 1983 by USEPA (48 FR 5684) are available for obligation through FY 1984.

TABLE III

NUMBER OF SITES IDENTIFIED

STATE	STATE RANKING BY AMOUNT OF GRANT	DEC. 18, 1982 DRAFT REGS.	JAN. 17, 1983 FINAL REGS.	FINAL ALLOTMENT
ILLINDIS	10	425	543	\$ 353,000
INDIANA	12	349	435	8,000
MICHIGAN	8	428	624	405,000
MINNESOTA	27	18	198	129,000
NEW YORK	22	1,008	1,028	667,0 00
DHIO	4	594	764	496,000
PENNSYLVANIA	5	578	, 748	486,000
WISCONSIN	26	170	202	131,000
GREAT LAKES		3,734	4,542	\$2,949,000

In terms of site designation on the National Priorities List, 156, or 37.3% of the 418 NPL sites nationwide are located in the Great Lakes states. They vary from 47 in Michigan (second highest in the country) to 0 in Wisconsin. Of this total, 67 sites, or 42.9% of all Great Lakes states sites, are within the Great Lakes basin. It must be noted that this figure is inflated due to the fact that all Michigan sites are in the basin. Excluding Michigan, 18.3% of all problem sites in Great Lakes states are in the basin. These percentages should be regarded as estimates, since the specific locations of several sites were unavailable at preparation of this paper. The reader is referred to Table IV for a complete listing.

In terms of problem severity, we find that the Great Lakes states colelctively have 30 sites in the "top 100" of the National Priorities List. Five of those sites are in the "top twenty" and three in the "top ten," including the number one priority site in Fridley, Minnesota.

LIST OF HAZARDOUS WASTE SITES IN THE GREAT LAKES STATES UNDER SUPERFUND*

TABLE IV

(Note: An asterisk identifies cites within the Great Lakes basin. This is a "best judgment" designation by GLC staff based on available information.)

STATE	LOCATION	PRIORITY NUMBER	FACILITY NAME
ILLINDIS	Greenup	64	A & F Materials
	Winnebago	370	Acme Solvent-Morristown
	Ogle County	417	Belvidere Municipal Landfill #1
		346	Byron Salvage Yard
	Pembroke	224	Cross BrosPembroke
	Galesburg	333	Galesburg-Koppers
	*Waukegan	267	Johns-Manville
	LaSalle	383	LaSalle Elect. Ut.
	*Waukegan		Outboard Marine Corp.
	Marshall	151	Veliscol Illinois
	*Wauconda	108	Wauconda Sand & Gravel
INDIANA	Boone County	176	Envirochem
	*LaPorte	117	Fisher Calo
	*Gary	275	Lake Sandy Jo
	Bloomington	207	Neals landfill
•	Gary	247	Ninth Ave. Dump
	*Alleri County	418	Parrot Road
	Seymour	51	
	Columbia City	218	Wayne Waste Dil
	Lebanon	378	Wedzeb, Inc.
MICHIGAN	(all sites are i		
	Adrian	381	Anderson Development
•	Kalamazoo	367	Auuto
	Swartz Creek	16	Berlin & Farro
	Grand Rapids	139	Butterworth Number 2 Landfill
	Rose Township	342	Cemetery dump site
	Charlevoix	- 371	municipal well
	Grand Rapids	2 76	Chem Central
	Clare	363	water supply
	Marquette	336	Cliff-Down Dump
	Muskegon	337	Duell & Gardner landfill
	Buchanon	402	Electrovoice
	Otisville	2 69	Forest Waste Products
171	Utica	146	G & H Landfill
	Greilickville	236	Grand Traverse
	St. Louis	248	Overall & Supply Co. Gratiot County Golf Course
	St. Louis	74	Gratiot County Landfill
	Oscoda	376	Hedblum Industries

TABLE IV (cont'd)

LIST OF HAZARDOUS WASTE SITES IN THE GREAT LAKES STATES UNDER SUPERFUND

STATE	LOCATION	PRIORITY NUMBER	FACILITY NAME
MI CHI GAN	Ionia	284	City landfill
Cont.'d	Kalamazoo	281	K & L Avenue landfill
	Kentwood	321	Landfill
	Utica	26	Liquid Disposal Inc.
	0den	366	Littfield Twnshp. Dump
	Ludington	341	Mason County Landfill
	Albion	191	McGraw-Edison_
	Cadillac	53	Northernaire Plating
	Temperance	78	Novaco Industries
	Grandville	359	Organic Chemicals
	South Ossineke	351	Ossineke
	Muskegon	109	Ott-Story-Cordova
	Filer City	122	Packaging Corp. of America
	Petoskey	316	Municipal wells
	Brighton	375	Rasmussen's Dump
	Rose Township	135	Township dump
	Muskegon	31	SCA Indepdent Landfill
,	Livingston County	382	Shiawasee River
	Park Township	56	Southwest Ottawa Landfill
	Sparta	369	Landfill
	Wyoming	234	Sparta Chemical Co.
	Brighton	103	Spiegelburg Landfill
	Davisburg	121	Springfield Township Dump
	Mancelona	153	Tar Lake
	Niles	352	U.S. Aviex
	St. Louis	152.	Velicsol Michigan
	Pennfield Township	169	Verona well field
	Pleasant Plains Twns	shp. 118	Wash King Laundry
	Whitehall	283	wells
MINNESOTA	(none in basin)		
	Brainard-Baxter	48	Burlington Northern
	Fridley	1	FMC
	St. Paul	67	Kopper's Coke
	Lehillier-Mankato	138	Lehillier
	St. Louis Park	134	National Lead Taracorp
	New Brighton-Arden	42	New Brighton
_	Oakdale	62	
.5	St. Louis	43	Reilly Tar
	Andover	322	South Andover site
	Anoka County	236	Waste Disposal Eng.

TABLE IV (cont'd)

LIST OF HAZARDOUS WASTE SITES IN THE GREAT LAKES STATES UNDER SUPERFUND

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Heights 17 Slens Falls 14 Falls 33 Falls 11 Falls 39 Falls 25 Falls 25	Landf: Well Facet Fulto G.E. Hooke	ill field Enterprises n Terminals Moreau site
lle 30 oring 39 19	67 Kentu 16 Love 01 Ludlo 95 Marat 92 Mercu	r-South Area r-102nd Street cky Ave. well field Canal w Sand & Gravel hon Battery ry Refining
	44 Old B	ra County Refuse bethpage Landfill
19		field stion Abatement Serv. ill
	90 Landf 6 Sincl	air Refinery
aen 3. Bay 1	D1 Syoss 22 Water 58 Wide	ent Savers set Landfill supply Beach Development Oil Company
ille 3 ville airsville on cton con 2 ouls ille 2 ville 3 ville 3	29 Arcar 34 Big [17 Bower 37 Bucke 77 Chem 64 City 44 E.H. 28 Field 66 Neas 606 New 616 Popl 625 Pris	ed Chemical num Iron & Metal D Campgrounds rs Landfill eye Reclamation Dyne landfill Schilling Landfill ds Brook z Landfill e Chemical Lyme Landfill ar Dil tine Creek-Jack Webb
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TABLE IV (cont'd)

LIST OF HAZARDOUS WASTE SITES IN THE GREAT LAKES STATES UNDER SUPERFUND

STATE	LOCATION	PRIDRITY NUMBER	FACILITY NAME
OHIO (cont	'd)		
	West Chester Deerfield Marietta Zanesville	398 115 414 408	Skinner Landfill Summit National Van Dale Junkyard well field
PENNSYLVAN	IIA .		
	Westchester Townshi Stroudsburg Bruin Boro State College Parker Douglasville Lock Haven Philadelphia Warminster Haverford West Ormrod Buffalo Kimberton Old Forge Old Forge Harrison Township *Girard Township Malvern McAdoo Philadelphia Lower Provident Twn Seven Valleys Grove City Palmerton *Erie Jefferson King of Prussia	380 261 415 65 271 238 406 274 226 123 403 309 396 129 265 171 21 857 291 857 175 296 290 347	Blosenski Landfill Brodhead Creek Bruin Lagoon Centre County Kepone Craig Farm Drum Site Doglasville Disposal Drake Chemical Inc. Enterprise Ave. Fischer & Porter Haverford PCP site Heleva Landfill Hranica Lackawanna Refuse Lehigh Electric Lindande Dump Lord Shope TCE site Metal Banks Moyers Landfill Old City of York Landfill Osborne Zinc pile Presque Isle Resin Disposal Stanley Kessler Voortman
	Upper Saucon Townsh Chester Westline	30B 374	Wade (ABM)

WISCONSIN

No superfund sites were listed for the state.

POTENTIAL ISSUES FOR GLC CONSIDERATION

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) (PL 96-510), and the Superfund program embodied in it are exceedingly complex. The short introduction provided here does not permit generation of indepth recommendations for modification of the Superfund program or the law itself. However, we can identify several concerns of potential interest that may provide a basis for further discussion. The staff recommends that appropriate hazardous waste management officials in each of the Great Lakes states be consulted prior to any definitive GLC action. Potential issues for GLC discussion and action include:

- 1. CERCLA (PL 96-510) was enacted December 11, 1980, and authorized programs for five years. It is now almost two and one-half years old, and while progress is being made under the Superfund program, much remains to be done. The GLC may wish to address the reauthorization issue.
- 2. The cash flow in the Superfund is of some concern. Pursuant to provisions in CERCLA, the tax levied on industry will terminate if the Superfund balance exceeds \$900 million on September 30, 1983. Should the balance exceed \$500 million on either September 30, 1984 or September 30, 1985, the tax would end as well. Timely disbursement of funds is therefore a critical issue. Recent controversy regarding USEPA administration of the Superfund program has raised concern that fund disbursement may be delayed.
- 3. The present funding ceiling for the Hazardous Substance Response Fund is \$1.6 billion, while nationwide clean-up needs are estimated to cost up to \$40 billion. The adequacy of the current funding ceiling may be worthy of GLC attention.
- 4. The Superfund program requires, in most cases, state participation in a cost-sharing arrangement. Costly clean-up efforts may be beyond existing state financial capabilities, thereby delaying timely removal or remedial actions. The federal-state cooperation provisions of CERCLA addressing both funding and program implementation arrangements may be a potential issue for GLC consideration.
- 5. As evidenced in earlier discussion, the Great Lakes states, as a region, account for over one-third of all National Priority List sites in the country. Therefore, the adequacy of Superfund monies and response mechanisms to address these sites is of great concern. The GLC may wish to survey its member states to determine a) whether there are any common problems in the Great Lakes region; and b) appropriate GLC actions which might be taken to assist in their mitigation.
- 6. Various national and regional organizations, such as the National Governors Association, have developed policy positions on hazardous waste management issues. The GLC may wish to compile these positions and consider a statement of support if the position(s) are consistent with those of the GLC.

RESOLUTION

- REAUTHORIZATION AND REVISION OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 (P.L. 95-510)
- WHEREAS, the improper disposal of hazardous wastes is increasingly recognized as a threat to the health and well-being of the residents of the Great Lakes states and the nation; and
- WHEREAS, this problem is particularly acute in the Great Lakes states, where over one-third of all sites on the National Priorities List are located:
- WHEREAS, federal funding assistance in the prompt emergency and remedial clean-up of federally designated sites is an absolute necessity in protecting the health and well being of residents in the Great Lakes states and the natural resources upon which their health and economic vitality depend; and
- WHEREAS, the intent of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (P.L. 96-510) is fundamentally sound but in need of selected modifications:
- THEREFORE, BE IT RESOLVED that the Great Lakes Commission supports resultorization of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (P.L. 96-510); and
- BE IT FURTHER RESOLVED that the Great Lakes Commission recommends the following modifications to the Act;
 - o a five-year reauthorization of the Act (through 1990).
 - o an increase in the funding celling of the Hazardous Substance Response Fund to permit adequate response to problem sites.
 - o timely disbursement of funds to ensure prompt attention to problem sites and continued flow of revenues into the fund.
 - o provisions for state participation which provide realistic financing and cost sharing arrangements which ensure prompt clean-up efforts without placing undue financial burden on the states.
- BE IT FURTHER RESOLVED that the Great Lakes Commission present these, and any additional collective views of its member states, to the Great Lakes Congressional delegation, appropriate Congressional Committees and the federal agencies responsible for funding, administration and implementation of clean-up activities at problem hazardous waste sites; and
- BE IT FURTHER RESOLVED that informational copies be provided to the Council of Great Lakes Governors, National Governors Association and the National Conference of State Legislatures.
- Recommended for adoption by the Subcommittee on Land and Air, May 25, 1983, as amended
- Recommended for adoption by the Natural Resources Management Committee, May 25, 1983
- Adopted by the GREAT LAKES COMMISSION, May 25, 1983

SUPERFUND UPDATE: THE STATUS OF CERCLA AFTER ITS FIRST THREE YEARS

Introduction

It is almost three years since the enactment of the Comprehensive Environmental Response, Compensation, and Liability Act (PL 96-510), commonly known as CERCLA or Superfund. Forged by a continuing, intense public debate over hazardous waste issues, the prospects for rapid achievement of Superfund's goals are not bright. Implementation of Superfund has been hampered by lack of information on the scope of the hazardous waste pollution problem and an incomplete scientific understanding of the mechanisms necessary for cleanup efforts.

Early implementation of Superfund would have been difficult even without turmoil at the Environmental Protection Agency (EPA) over the past three years. Former EPA Administrator Anne Burford's resignation was largely the result of her handling of Superfund-related issues. The former head of the Superfund program, Rita Lavelle, has been convicted of perjury and obstruction of Congressional investigations. Various other important EPA officials with hazardous waste management responsibilities have also resigned or been fired. EPA is currently trying to restore confidence in its Superfund program through the efforts of a respected Administrator, William Ruckelshaus. and a capable Assistant Administrator, Lee Thomas.

The magnitude of the hazardous waste problem was not well known at the time Congress held its deliberations on the merits of Superfund. The legislative intent of Superfund was to deal directly with hazardous waste management in a problem solving, site-by-site manner. CERCLA has had uneven success in acheiving the Congressionally mandated concept of on-site cleanup. Modifications on the basically solid framework will be made based on more complete information during reauthorization consideration this year.

The general purposes of Superfund are clear. Generators and handlers of hazardous wates must inform the government of releases of hazardous substances. CERCLA provides funds for government cleanup efforts and supplies a legal foundation for actions against the parties responsible for hazardous waste pollution. The EPA handles hazardous waste emergencies on land and in nontidal inland waters, while the U.S. Coast Guard concerns itself with emergency operations in coastal and inland tidal waters, the Great Lakes and certain ports and harbors. However, inconsistent policy development and judicial interpretation coupled with competing or nonexistent legislative history has made CERCLA a confusing law.

Superfund has placed enormous burdens on the EPA regional offices. CERCLA is the first major environmental law that cannot be primarily administered through national regulations and individual permits. The Superfund program, instead, revolves around site-specific, factually complex litigation between the federal government and changing groups of well-represented corporations. As CERCLA cases create new precedents, many court decisions and appeals will be necessary before clarity is achieved for the Superfund program.

Aside from the legal, procedural and regulatory problems, there is presently little reliable information on environmental and health effects of hazardous wastes that is generally applicable. The appropriate extent of remedial action at each site is likely to remain resolvable only on a case-by-case basis.

Superfund is an important component in hazardous waste management activities in the Great Lakes. This Superfund status report covers national trends, but also lists all removal actions taken in the Great Lakes states, lists the Great Lakes additions to the National Priorities List and surveys state superfunds in the Great Lakes.

The Status of Superfund Implementation

EPA has taken significant actions to implement Superfund. EPA published a generally well-received National Contingency Plan (47 FR 31180)(1982), including a recently revised National Priority List of those sites where releases of hazardous substances have occurred or are imminent (48 FR 40658)(1983), addressed in detail later in this article. EPA has also proposed a useful table of reportable quantities of hazardous substances (48 FR 23552)(1982). Some cleanup has taken place at many of the top priority Superfund sites, although, in most cases, this means that the drums of wastes and the first inches of contaminated soil have been removed and disposed of at authorized facilities. EPA and private parties, agreeing among themselves to conduct such activities, have also initiated more sophisticated subsurface investigations.

One of the strongest criticisms of the Superfund program came in the March 1983 Office of Technology Assessment (OTA) report "Technologies and Management Strategies for Hazardous Waste Controls". OTA found that the program might be "ineffective in the long-term" due to the fact that wastes are simply removed to other burial sites where future leakage of liquid waste in groundwater is likely.

Through January 21, 1983, EPA had mailed 2,076 letters to responsible parties requesting cleanup of 130 abandoned dumps. The letters led to negotiations over cleanup at 68 sites and commitments to do so at 14. Talks concerning amother 28 sites ended in failure.

By mid-April 1983, EPA had completely cleaned up five sites, taking an average of 44 months for each site. Work was proceeding at 89 more sites, feasibility studies had begun at 57 sites, design work at 18, and actual cleanup activities had been initiated at 14 locations. Remedial work had been completed at one further site by January 10, 1984.

As of September 30, 1983, EPA reported that it had obligated more than \$47 million to pay for emergency cleanup actions at 206 sites, 153 of which have been completed over the last three years under the emergency response program which deals with "imminent threats to public health and the environment". For instance, a study released by EPA in early May by its Office of Management Systems and Evaluation noted that about 200 sites on the Superfund National Priorities List posed imminent threat of fire and explosion. About 90% of emergency cleanups are physically handled in-house, or

through contract, by the parties responsible for creating the emergency situations. In the remaining 10% of the cases, either EPA or the Coast Guard leads the cleanup or provides technical assistance to state or local agencies. Of the removal actions completed, 131 were EPA actions, 21 were Coast Guard actions and one response was undertaken by Ohio under a cooperative agreement with EPA. From December 1980 through January 10, 1984, 231 emergency removal actions had been approved with 185 having been completed.

The Great Lakes States were well-represented in the list of completed actions. The state with the highest total of emergency removals in the nation was Pennsylvania with thirteen. New York tied for fifth in the U.S. with eight sites and Illinois, Indiana and Michigan all tied for seventh with seven sites each. A summary of the removal actions taken through September 30, 1983 in the Great Lakes states is contained in Appendix I. EPA also reported that the average cost of the completed responses was about \$235,000. The average time to complete such action, based on a random sample of 69 completed responses, was about 23 days.

In addition to the 153 sites where emergency responses have been completed, as of September 30, 1983 EPA had obligated an additional \$124.6 million for remedial cleanup of sites that do not pose immediate danger. EPA has authorized its regional offices to commit up to \$250,000 to begin site cleanup without prior approval from headquarters.

EPA has insisted on preserving maximum potential generator liability. Informed opinion is that there would have been more voluntary efforts to investigate environmental harm and formulate potential solutions for one crucial EPA decision. On May 20, 1983, in a memorandum ("Interim Pre-Litigation Settlement Procedures in Hazardous Waste Cases") from Michael Brown, Enforcement Counsel, to Regional Cousel, EPA retracted the right of private parties to conduct remedial investigations and feasibility studies (RI/FS) in lieu of governmental efforts, except when those private parties also agree to conduct whatever remedial efforts EPA determines are necessary. Private parties are asked to sign, in effect, "blank checks", committing themselves to construct whatever cleanup facilities EPA eventually determines are appropriate. The agreements also require private parties to cover the unknown costs of operating and maintaining the facilities for up to 30 years. The EPA strategy in this case, an effort to recover from the alleged "sweetheart deals" associated with Rita Lavelle, involves avoiding settlement discussions with industry almost entirely and spends the Superfund as quickly as possible. The policy is currently being reconsidered in light of widespread state and regional EPA criticism. EPA is also realizing that if the Agency pays for all the costly RI/FSs, little Superfund money will be available for ultimate cleanup actions.

Another impediment to cleanup is that, under the current law, states must pay for 10% of the cost of cleaning up private abandoned dumps and at least half of the costs for publicly owned dumps. Only 22 states have their own trust funds to finance such cleanups, and the rest must allocate the money by legislative action. Work at as many as 300 of the original 419 National Priority List sites could have been stalled by the lack of financial participation.

However, on May 7, 1983 William Hedeman, Director of EPA's Office of Emergency and Remedial Response announced that the Agency was waiving its present policy of requiring the 10% contribution. The Agency is moving toward 100% funding of initial investigations and feasibility studies because of the need to act quickly and because 42 states have no money for the actual remedial work at sites. Remedial investigations and feasibility studies cost from \$400,000 to \$600,000, according to Hedeman. Preliminary studies used to produce remedial action master plans cost about \$20,000.

Further changes in the Superfund program were announced May 13 by then acting-Administrator Thomas:

- o More authority was given to the Agency's 10 regional offices to make decisions in the field about proceeding with cleanup;
- o An evaluation of all sites on the National Priority List will be made to determine how many of them could be made safer through quick, limited removal of surface toxic wastes while strategies for more thorough site cleanups can be developed;
- o Investigations of additional sites to be cleaned up under the hazardous waste program will be accelerated using a special appropriation from Congress:
- o EPA will make a shift toward recovering money from companies responsible for the waste dumps after the government has cleaned up the site, instead of trying to recover the money before cleanup, the general practice up to that time;
- o EPA will seek better coordination with other Federal agencies, including the Center for Disease Control and the Corps of Engineers, in evaluating the risks at waste dumps and managing cleanup operations; o EPA will keep local communities informed about the problems of waste dumps in their area and involve citizens in cleanup plans and actions.

In another policy shift, EPA will routinely release the names of parties responsible for hazardous waste contamination in an effort to increase voluntary cleanup of hazardous waste sites. EPA intends to diclose the names of all responsible parties in notice letters and may later also release information on the amounts of waste each party dumped at a particular site. The Agency will withhold names of responsible parties and pertinent information in cases where disclosure would harm an enforcement action.

Superfund in Fiscal 1984

On October 31, 1983, Director of EPA's Office of Emergency and Remedial Response William Hedeman Jr. said that the agency was considering seeking supplemental appropriations for the Superfund program. The hazardous substance cleanup program received a \$410 million appropriation for fiscal year 1984. About \$175 million of this amount will be used for remedial programs. In his State of the Union Message January 25, President Reagan endorsed reauthorization of ČERCLA and offered a proposal for \$50 million in supplemental appropriations for fiscal year 1984, as well as \$640 million for the program in fiscal year 1985.

Hedeman said there is "no question" that EPA will not have sufficient funds to respond to the hazardous waste sites identified in an October 25 remedial accomplishments plan for fiscal 1984. The plan provides for 65 new

remedial investigation and feasibility studies, 32 remedial design projects, 12 remedial actions, eight initial remedial measures, 4,000 preliminary assessments at sites, and 1,300 site inspections. EPA Region V, which includes six of the eight Great Lakes States, is expected to initiate 17 to 23 new remedial investigations and feasibility studies, or about 29% of the national total.

The reason that further funding may be necessary is that original cleanup estimates of \$6.5 million per site are inaccurate. The March 1983 OTA report projected that the \$1.6 billion Superfund program to clean up abandoned hazardous waste sites will actually require from \$10 to \$40 billion to accomplish CERCLA's goal of cleaning up 15,000 known and listed hazardous waste disposal sites in the United States. (Since that report was issued, EPA has listed several thousand more sites and contemplates an eventual 20,000 to 22,000 sites.) EPA expects the Superfund will be exhausted early in fiscal year 1986, after paying for cleanup at an estimated 170 sites.

EPA has found that costs of \$4.5 million to \$6 million per site are incurred to control contamination and another \$4 million to \$5 million per site is needed to contain or remove residual groundwater contamination. Most of the waste sites with contaminated groundwater will be involved in 10- to 20-year pump and treat operations. In December 1983, an EPA report stated that 305, or 56%, of the 546 sites currently on the National Priority List have groundwater contamination problems, and added that 122 of those sites will require EPA action to eliminate that hazard. EPA also noted that at 350 of the listed sites, the groundwater is the only drinking water source.

A December 6, 1983 report prepared to help EPA decide on legislative strategy for extending the Superfund program estimated that the Agency will have to spend at least \$8.4 billion and as much as \$16 billion to clean up an estimated total of 1,400 to 2,200 of the worst hazardous waste sites. The document, prepared by EPA's Superfund Task Force for Alvin Alm, Deputy Administrator, and Lee Thomas, was released at a press conference by Rep. James Florio (D-N.J.), chairman of the House Energy and Commerce Subcommittee on Commerce, Transportation and Tourism.

Taking the midpoint of the high and low estimates of the number of sites that will need cleanup, EPA projected that 14 years would be necessary to clean up 1,800 sites. The calculation assumed an expenditure rate of \$640 million a year, which was the President's fiscal 1985 budget appropriation. The estimated cost of cleaning up the 1,800 sites "could run as high as \$11.4 billion" in 1983 constant dollars, in addition to the \$1.6 billion authorized for Superfund, according to the report.

Despite the common belief that \$1.6 billion is currently available for cleanups in the Superfund, this amount is a total figure to be generated from 1980 to 1985. As of June 30, 1983, CERCLA's taxing mechanism had accumulated \$668.5 million. During fiscal years 1980-83, Congress appropriated \$474.5 million. With the current \$410 million appropriation, Congressional appropriations total \$884 million and are ahead of actual revenue collection. According to EPA, the tax on chemical feedstocks is generating about \$5 million less per month than was initially projected in 1980. At the end of November, EPA had obligated 99% of all money made available by Congress, evidence of a far greater demand on the Fund than can be met.

This represents a tremendous shift in fund allocation policy from January 31, 1983 when EPA had disbursed only \$124 million of the Superfund. Of the \$573 million then in the fund, EPA was obligated to pay an additional \$246 million for planned cleanup work, leaving an unobligated balance of \$327 million.

The recently released EPA report on Superfund found "the most feasible" method to support cleanup action is a combination feedstock and waste-end tax. The current chemical feedstock tax raises about \$300 million a year according to the report. If the tax rate were raised to the current statutory ceiling of 2% of the sales price of the chemical feedstocks and if the current exemptions from the tax were removed, CERCLA could be used to raise slightly more than \$1 billion a year, the report stated. The fertilizer, copper, lead and zinc industries are at present exempt from the tax.

In contrast, a waste-end tax, according to preliminary estimates, could raise approximately \$450 million more per year.

Another source of funding for cleanup activities has been EPA enforcement actions. As of May 1983, responsible industry parties had been forced to provide \$61.5 million to the Superfund. Negotiated settlements to that date resulted in \$121.8 million worth of cleanup work by the responsible parties.

In pursuit of those responsible, EPA issued eight administrative orders in 1982 as the first step toward taking a company to court to force the payment of treble damages for cleanup work. Only two such orders had been issued by May 1983, but the rescission of an internal EPA memo prohibiting orders has begun to free up 30 more orders then "in the pipeline".

Final regulations for collection of taxes on hazardous waste, petroleum and chemicals used to finance Superfund were issued by the Internal Revenue Service November 25 (48 FR 53390). The regulations (I.D. 7923) affect petroleum importers, U.S. refinery operators, chemical manufacturers, producers and importers, as well as owners and operators of qualified hazardous waste disposal facilities.

Effective October 1, 1983, taxes derived from hazardous waste disposal facilities will be used to finance the \$200 million post-closure liability fund for waste management facilities under CERCLA. Collected under interim rules since March 31, 1981, the tax on petroleum and chemicals will continue to be used for renewing the \$1.6 billion Superfund cleanup program.

Updated National Priority List

CERCLA §105 (8)(b) states that a National Priorities List (NPL) is to be developed for the purpose of prioritizing response actions. EPA issued guidelines for establishing the NPL on June 28, 1982 and on December 20, 1982 EPA released a list of the 418 most dangerous hazardous waste sites.

The NPL is developed by:

- o identifying candidate sites;
- o investigating the sites and notifying local governments;
- o applying the Hazard Ranking System (HRS)(developed for EPA by Mitre Corp.) to generate a score for the site;

- o having the state involved submit the site for the NPL to EPA;
- o sending Regional EPA submissions to EPA headquarters;
- o compiling a first list and proposing the NPL in the Federal Register;
- o reviewing comments and publishing the final NPL in the Federal Register.

The primary responsibility for the nomination and scoring of sites and documenting the score rests with the States. The EPA regional offices are responsible for providing technical assistance to the States for site scoring activities to assure a consistent approach to applying the HRS. The regional offices are also responsible for providing full information to the Office of Solid Waste and Emergency Response pertaining to negotiations with responsible parties.

All sites on the NPL are to be treated as candidates eligible for response and/or enforcement. Exclusion from the list does not preclude enforcement actions under CERCLA. The sites that will receive the highest priority for response funding will be those for which the State has provided cost-sharing and other assurances and where enforcement actions do not appear promising. Priorities for funding within this group will be based upon risks to public health and the environment as measured by the HRS, and on a case-by-case evaluation of economic, engineering and environmental considerations.

As CERCLA requires an annual update of the NPL, a new list of 546 sites was announced by EPA September 1, 1983. Of the original list of 419 sites proposed for the NPL last year (Times Beach, Missouri was added after December 20, 1982), EPA designated a final list of 413 and proposed adding 133 more sites to the list. A complete list of the additional sites in the Great Lakes can be found as Appendix II herein.

As of late November, EPA had enforcement or funding efforts in progress at 367 of the 546 sites on, or proposed for the NPL. This figure represents a significant change from July 15, 1983 when 6 of the 419 priority sites had been cleaned up, 22 were in the process of being cleaned up, and 90 to 100 other sites were being studied. More recently, EPA reported that during the week of January 10, 1984 cleanup work was being carried out at 175 sites, comprised of 44 removal actions and 141 long-term remedial actions. EPA expects that the NPL will grow to between 1,400 and 2,200 sites, not including sites under RCRA regulation, federal facilities or solid waste landfills.

Superfund Legal Issues

Most of the legal issues considered important when CERCLA was passed have remained unresolved. The Courts have yet to determine the categories of parties beyond owners and operators of Superfund sites that are liable under the §107 cost recovery provisions of CERCLA. Iwo federal district courts have addressed the question of responsible parties in the context of the injunctive provisions of §106 but are in disagreement. The court in United States v. Wade (Wade I)(546 F. Supp. 785 (E.D. Pa. 1982), appeal dismissed) held that non-negligent, off-site generators are not included within the coverage of §106(a). The court in United States v. Price (D.N.J. July 28, 1983) disagreed with Wade I and ruled that such generators are to be judged under a theory of strict liability.

In the first decision dealing with the issue of joint and several liability for statutory Superfund actions, the court in United States v. Chem-Dyne Corp. (S.D. Ohio October 11, 1983), held, in denying defendant generators' motion for partial summary judgment, that in appropriate factual situations CERCLA defendants may be jointly and severally liable. However, if the harm is divisible "and there is a reasonable basis for apportionment of damages, each defendant is liable only for the portion of the harm he himself has caused".

The most recent Superfund decision, United States v. Wade, (Wade II)(No. 79-1426 (E.D. Pa., December 20, 1983) produced a first decision on what the government must show to prove its case against a defendent hazardous waste generator under §107. The court held that the government need not prove that the actual waste of a particular generator was the subject of a response or removal action, but need only prove that a defendant's waste was disposed of at a site and that the substances that make the defendant's waste hazardous are also present at the site.

The ruling also included a second affirmation of the government position on joint and several liability. The court found that joint and several liability, although not mandatory under the Superfund statute, may be imposed unless the defendants can demonstrate that they can apportion the harm caused at the site among themselves.

Pending litigation may yield additional rulings on the joint and several issue as well as decisions on the legal questions. Additionally, state courts have issued major opinions relying on common law principles to establish the joint liability of handlers of hazardous waste.

No legal issue under CERCLA is as volatile to potentially responsible parties as the government's contention that persons may be held responsible when they merely deal with the operators of a problem site. According to a brief recently filed in a South Carolina case (United States v. South Carolina Recycling & Disposal, Inc., No. 80-1274-6 (D.S.C.), the federal government is not required to show that a defendant's waste caused a release or threatened release which caused the federal government to incur response costs. To establish generator liability, the Justice Department lawyers asserted that the government meet a two-part requirement under §107 showing 1) that a generator arranged with another person for disposal or treatment of its hazardous substances; and 2) that there was a release or a threatened release of hazardous substances from the facility at which the generators' hazardous substances were stored, treated or disposed.

In contrast, counsel for a group of generators characterized the government's theory of Superfund cost-recovery as: "Anyone who at any time transacted any business with the owner or operator of any disposal site is strictly, jointly and severally, and retroactively liable for any threatened or actual release of any hazardous substances at any disposal sites owned or operated by that owner or operator".

It is important to remember that the client being represented by Justice is the United States government. If that client's policy is to request that its attorneys attempt to place the costs of hazardous waste site cleanup on

private parties wherever possible, the South Carolina Recycling case brief certainly attempts to accomplish that policy objective. However, if successful, the government may produce adverse impacts through its extreme theory: there seems to be little incentive for a generator to package its particular waste in state-of-the-art containers if they are to be shipped to a site where other parties are not following the same precautions. Generators would then have to bear the largely impossible burden of not only looking after their waste, but also to make sure all other materials contributed to the common site are properly handled.

The case, with its unusual application of the cost-recovery concept, has yet to be heard by a federal judge. The results should be significant in the building of a body of law under CERCLA.

Private Causes of Action Under Superfund

On the issue of the extent to which CERCLA implies private causes of action, there is already one case (Bralow v. Owens+Corning Fiberglas Corp., No. 83-2878 (D.N.J., complaint filed August 8, 1983) in which a private party is attempting to use Superfund to recover damages other than incurred cleanup costs from another private party. While the action appears to be unauthorized by CERCLA, the case illustrates the complex nature of the law developing under CERCLA.

In a related action, the United States District Court for the Eastern District of Pennsylvania held November 15, 1983 that the Eleventh amendment to the U.S. Constitution barred an attempt by the Union Gas Co. to include Pennsylvania and the Borough of Stroudsburg as "third party" defendents in a Superfund action brought against Union Gas by the Federal government (U.S. v. Union Gas Co. v. Stroudsburg, No. 83-2456). The state and the borough are owners and operators of the facility at which the government conducted removal and remedial action under Superfund for the purpose of cleaning up hazardous substances released into a creek near Stroudsburg, the company contended.

The court found that Union Gas claimed that Congress, in enacting CERCLA, effectively abrogated the states' immunity from suit by private citizens seeking indemnity for costs incurred in cleaning up hazardous waste sites. Stating that any Congressional waiver in CERCLA of the states' sovereign immunity embodied in the Eleventh Amendment must therefore be found in the legislative history, Judge Louis C. Bechtle held that neither the House nor Senate reports on the Superfund law indicated an intent to include a governmental entity as a defendant in an action brought by a private party.

Another pending case is believed to be the first instance in which a lawsuit has been filed under CERCLA to require the federal government and three companies to clean up a hazardous waste site. Cadillac Fairview/California Inc. asked the U.S. District Court for the Central District of California on December 9, 1983, to declare that Dow Chemical Co.; Shell Oil Co.; Cabot, Cabot and Forbes Interim Co. (CC&F); and the General Services Administration are responsible for cleaning up a site in Torrance, California (Cadillac Fairview v. Dow Chemical, No. 83-7996-LTL). EPA is also named as a defendant in the suit, which seeks "an injunction directing the administrator of the EPA to approve and certify a removal or remedial plan for the site consistent with the National Contingency Plan to prevent further injury to the environment".

Cadillac Fairview purchased the site in October 1976 from CC&F with the intention of developing the land as a commercial and industrial center, but claims that it was not informed at the time of purchase that hazardous waste had been disposed of on the site. Cadillac Fairview states that it did not become aware of the hazardous wastes on the site until it attempted to sell part of the property in February 1981. The firm seeks a declaration that the company has no liability under CERCLA for the cost of cleanup at the site.

State Superfund Laws in the Great Lakes

Thirty-six states nationally have a total of 50 statutory funds or fee systems that can be used to respond to or prevent releases of hazardous substances. The state funds are used for abandoned site cleanup, emergency responses to releases of hazardous substances, and perpetual care of disposal sites. About half of the states enacted their Superfund statutes after the passage of CERCLA. Some of the states that had similar statutes prior to CERCLA subsequently amended them for greater consistency with the federal law.

In analyzing the varied state laws and their programs in relation to CERCLA, three aspects are of essential interest. The revenue-generating provisions indicate the degree of adequacy of funding and the risk of preemption by CERCLA. The uses of the State funds indicate whether they overlap or extend CERCLA's coverage. While all the state Superfunds are specific about funding sources and uses, about one-third also specify liability standards, especially interesting because of the controversy over liability standards under CERCLA.

The state superfunds of the Great Lakes States and their characteristics are listed in a table as Appendix III. The Appendix also includes the statutory citations for each funding provision.

Emerging Superfund Conflicts

Although many current CERCLA issues remain unresolved, it is possible to anticipate a list of other issues that may become active in the coming months:

- o Owners of sites on the recently promulgated National Priorities List may decide to challenge the list and the rules that EPA has promulgated for "delisting" sites (48 FR 40668, 40669).
- o Potentially responsible parties may challenge proposed expenditures by EPA at specific sites on the basis that some or all of those expenditures may be unwise or unnecessary.
- o Industry or environmental groups probably will challenge EPA's expected policy on the applicability of the Resource Conservation and Recovery Act (RCRA) requirements activities conducted in a federally supervised Superfund cleanup action. Industry might be expected to challenge the policy if EPA declares that RCRA applies in addition to the stipulated Superfund cleanup precautions; environmental groups, if EPA determines that RCRA does not apply.
- o Although CERCLA includes the expectation that EPA will allow potentially responsible parties some opportunities to voluntarily undertake response and remedial efforts, the Agency and industry tend to disagree over the point in the Superfund process when responsible parties

should participate. Resolution of this issue will occur in cost-recovery actions and, at an earlier point in the process, in actions to enjoin expenditures of government monies.

o Pending EPA rules concerning claims against Superfund under §§111 and 112 of CERCLA by those who have incurred costs in responding to environmental problems in a manner consistent with the National Contingency Plan may cause conflict. If the EPA rules limit access to the Fund or limit the right of private parties to seek contributions from other potentially responsible parties, they may face court challenges. o Some conflicts may arise out of apparent differences among the various EPA Regional Offices as to the relative liabilities of transporters and generators in particular cases. Some EPA Regions seem to regard transporters of hazardous waste to be particularly appropriate defendants, probably because transporters often have a role in choosing the disposal site, and ostensibly were able to view operations at the site when they delivered the waste. Other Regions, such as Region V, have ignored transporters when the generators of the waste have been located (United States v. Seymour Recycling Corp., No. 1P-80-457-C (S.D. Indiana). The choice of appropriate defendants appears arbitrary since the applicable subsections of §107(a) of CERCLA foresee liability by both transporters and generators who had a role in the selection of a dump site. Private suits brought by generators against transporters and vice-versa, if not direct challenges to EPA settlement schemes, may result.

Conclusion

In the hazardous waste management area, there is more stability, commitment, and funding available for EPA than was the case two years ago. The resolution of several CERCLA legal cases should offer precedents to assist in similar suits. Subsurface environmental evaluations should soon be completed at many of the "top priority" Superfund sites, leading EPA to establish other precedents concerning tolerable levels on chemical contaminants in groundwater and soil, further reducing Superfund unknowns. The next three years of CERCLA should yield more staff for EPA, some reliable final rulings on the many Superfund legal issues, and continued interest in hazardous waste problems.

The Great Lakes area, a region greatly affected by hazardous waste problems, is providing leadership in development of the cleanup techniques and technology necessary for successful removal actions under Superfund. While struggling with the complexities and uncertainties of CERCLA regulation and law, the Great Lakes states are responding innovatively to solve the hazardous waste problem.

Appendix I

EPA SUMMARY OF REMOVAL ACTIONS AT HAZARDOUS WASTE SITES UNDER SUPERFUND LAW

pun Name: Site Name	Problem Environmental Threat	Action	Estimated Cost
llinois Bushnell: Aixon Plating	Threat of air pollution, fire, explosion, and direct contact by cvanide and acids leaking from drums and tanks in two abandoned plating company buildings.	Removal and disposal of wastes.	35.000
Chicago: Liquio Dynamics	Possibility of public health threat if fire or chemical release were to result from frequent vandalism at abandoned facility. On site were drums, semutanker compartments, and storage tanks of organic liquid wastes.	Site security. Cleaning of buildings and equipment. Removal of all raw materials. Removal and replacement of contaminated soil with clean till.	160.000
Danville: Danville Plating	Threat of soil and air contamination and direct contact from acids and heavy metals at abandoned electroplating facility.	Removal and neutralization of wastes. Building decontamination. Securing of drums.	80.000
East St. Louis: Abandoned drum	Surface water and soil contemination from drum found in stream. Resident complained of burns after contact with stream water.	Removel, overpecking, and transportation of drum to disposal facility.	1.50
Greenup A & F Materials*	Threat of overflow or dike failure of lagoon containing oil and PCBs.	Lowering and regrading of lagoon. Dike repair lastallation of supplemental lagoon cover. Consolidation of sludge and capping of sits.	340.00
Lethem: Geohart Fertilizer Co.	Threat of direct contact, fire, and explosion from passicules, fertilizers, oxidizers, and petroleum products in leaking containers at abandoned warehouse located in business district and near residential area.	Disposal of contaminated liquid fertilizers and of contaminated solids. Building cleanup.	120.00
Sauget: Doed Crock	Threat of soil and groundwater contamination and direct contact by heavy metals, solvents and PCBs discharged into dry creek bad.	Site security and limiting of access to site.	30.0
Indiana Bloomington: Benner: Landfill	Contamination of soil and surface water and contamination threat to groundwater from 240 capacitors leaking PCB-contaminated oil. Capacitors located both on surface and submerged in several ponds. Site was being used for recreational purposes.	Removal of capacitors. 2 cubic yards of contaminated soil, and insulator wrappings. Construction of fencing: posting of warning signs. Soil borns and groundwater surveys. Construction of clay cap and seeding sits.	5 5
Bloomington: Lemon Lane Landfill*	Soil contamination and threat of direct contact and groundwater contamination from capacitors leaking PCBs.	Construction of fence to limit access to site.	
Gary: Midco-1*	Contamination threat to groundwater, surface water, drinking water, soil, and air by organic and inorganic materials at a storage and solvent recovery facility.	Composer or infinite waster.	925.
Hammond: Steel Container (Calume	Threat of soil contamination, fire, and explosion by aromatic hydrocarbons, heavy metals, paint wastes, and solvents leaking from drums and tank trailers at a fire-damaged former drum rehabilitation facility.		20.
Hancock: Poer Farm*	Soil contamination from paint wastes and rasins contained in 275 builging or leaking drums. Contamination of well with heavy metals.	Construction of access roads and drum staging areas. Sampling, stage and disposal of drums.	
Ohio River: Abendoned drum	Threet of direct contact and surface water contamination from drum found floating in river.	Sampling, Disposal of contents.	1 890
Seymour Seymour Recycling*	Threat of fire, explosion, and contamination of air, surface water and groundwater by toroc metals, acids, and organic solvents at an inactive waste recycling and incineration facility with 80,000 deteriorating drums.	Limiting of access, strengthening of dikes, treatment of runoff, stabilization of explosives, and disposal of liquids.	890.

^{**}Estimated CERCLA funding to commercial compactors, status, and other federal agreement for someone dance. Does not employed compactor responses, respectively, and neveragement, or other accordance.

^{***} An expectate removel and planned removed at the same ofer counted in separate amount.

Michigan			
Cadillac: Northernaire Plating*	Contamination of groundwater, soil, and air, and threat of direct contact, from plating sludge, liquid plating solution, and wastes contaminated by chrome and cyanide at inactive electroplating facility.	Site security. Removal of plating wastes contained in tanks, drums, and boxes. Sealing of sewer line.	200.000
Detroit: Midnight dumping	Contamination threat to air, surface water, and soil from 170 barrels of paints, solvents, and volatile organics dumped along the readside.	Sampling, analysis, and disposal.	25.000
Hessel: Abandoned drum	Child discovered drum of unknown chemicals and became ill after inhaling furnes.	Overpecking and removal of drum. Helicopter search for additional drums.	4.000
Manistique: Abendoned drums	Threat of direct contact with drums — some empty, some containing unknown chemicals — found washed up on beach.	Overpacking and removal of drums.	3.000
Dalton Township: Ott Story Cordova*	Groundwater and surface water contamination from improper storage of chemicals.	Removal of leaking containers. Provision of alternate water sources to area residents.	265.000
Treverse City: East Bay	Drinking water contamination by aromatic organic chemicals.	Hookup of affected homes to city water main.	145.000
Utica: G&H Landfill*	Threat of direct contact with PCB-laden waste oil in seepage ponds on former landfull converted to recreation area.	Installation of fence to limit access. Construction of siphon dams and culverts.	55.000
Minnesota Isanti County: Isanti solvent sites	Threat of fire, explosion, direct contact, and contamination of soil, groundwater, and drinking water from hazardous wastes buried in drums and stored in a semi-trailer.	Sampling and analysis. Removal of surface drums. Buiking and disposal of liquids.	590.000
New York Niegare Fails Love Canai * (Black Creek)	Discharge of hazardous substances, including dioxin and other organics, into a creek flowing through a residential area.	Erection of security fence. Sampling and analysis. Construction of leachate collection system. Connection of sanitary and storm severs to leachate collection system.	60.000
Olean: Olean Well Field*	Groundwater and drinking water contamination by various organic substances from unknown source.	Installation and maintenance of 16 carbon filtration units. Periodic sampling and analysis of water supply.	25.000
Oswego Pollucion Abstement Services*	Hazards from tanks of contaminated waste oil. 12.000 leaking drums, and 3 lagoons containing 1.4 million gallons of oil and mixed hydrocarbons at an inactive incurerator site.	Treatment of lagoon water. Site fencing Overpacking of 1,200 drums. Installation of runoff controls.	355.000
Poughkeepsie: Berncolor, Inc.	Threat of fire, explosion, and contamination to surface water and drinking water from hazardous chemicals released during industrial fire.	Overpacking and removal of containers. Containment of runoff. Sorting and disposal of contaminated debris.	685.000
Queens: Fort Totten	Threat of hazards from drum of unknown liquids found floating in bay.	Removal of drum and sampling to identify contents, which proved to be paint and seawater. Disposal of drum and contents.	5,000
Rocksway Inlet: Abandoned drum	Direct contact hazard of chemical burns from drum of unknown substances found floating in inlet.	Testing, solidification, and disposal of contents.	1.000
Rye: Long Island Beach	Direct contact hexard of chemical burns by unknown substance discharged from a storm sewer onto a public beach.	Closing of beach. Sampling and analysis.	1.000
Tonewanda: Abandoned drum - Erie Canal	Surface water contamination and threat of fire, explosion, and direct contact from rusted, leaking drum found floating in Canal. Drum contained flammable organic solvents.	Sempling, analysis, overpacking, removal, and disposal of drum.	3.000

[&]quot;Site is an authoral National Principle Life (NPL) or on proposed update to NPL NPL also are aligned for further remedial associ.

^{**}Exument CERCLA bearing to communical communications above, and other second agriculus for followed activities early. Date and stacked costs for remedial responses, research and services control activities.

^{***}An interestinte removal and present removal at the sales sets, counted as experter attents.

Town Name: Site Name	Problem Environmental Threat	Action	Estimated Cost*
Ohio Akron: T.P. Long Chemical Co.	Hazards from leaking drums of organic compounds, chlorine, and acids, and from an open tank of sulfur compounds, at abandoned rubber products recycling facility.	Sampling and analysis. Removal and disposal of drums and contaminated soil.	\$0.0 00
Akron: Anaconcia Road	Threat of fire, explosion, direct contact, and contamination of groundwater and soil from PCBs, solvents, and flammable organics in 3 deteriorating tanks in illegal chemical storage area. Site located in densely populated area.	Removal and disposal of tanks and soil.	50.000
Ashtabula: Raser Tannery	Hazards from 600 drums, many damaged, of solvents and pigments at abandoned tannery.	Removal of all flammable and hazardous materials. Disposal of remaining drums.	43.000
Cleveland: Abandoned chemicals	Threat of fire, explosion, and direct contact from organic and inorganic chemicals left on site of abandoned ansiseptic manufacturing facility.	Sorting, sampling, lab-packing, and storage of chemicals prior to ultimate disposal.	\$0.000
Cleveland: Skiljan Dial Services	Radiation threat at 3 residences and Dial Services Manufacturing. Inc. Company had previously been a radium dial painting facility. Former owner of that facility, and of the residences, had left radium-contaminated viais on the property.	Disposal of 6.630 cubic feet of contaminated soil.	800.000
Clevelano: W. 58th St.	Hazaros from 7 drums of flammable liquids illegally dumped in a vacant lot one block from the business district.	Removal. sampling, and disposal of drums.	6.000
Cleveland: Chemicals and Minerals Reclamation	Hazards from drums of solvents, volatile organic chemicals, and sludges that were leaking from an inactive reclamation facility onto the banks of the Cuyahoga River.	Site security. Cleanup of spilled materials. Sampling of chemicals for compatibility, identification, and ultimate disposal.	455.000
Deerfield Township: Summit National*	Threat of fire, explosion, and contamination to soil, surface water, and groundwater from hazardous materials in tanks, lagoons, and thousands of deteriorating drums at inactive liquid waste storage and incideration facility.	Pumping and filtering of lagoon. Disposal of drums and contaminated soil.	9,000
Freemont: Greiners Lagoons	Hazards from overflow of wasts oil in ponds at an abandoned waste facility.	Disposal of debras. Capping of lagoons.	85.000
Hamilton: Chem-Dyne Corp.*	Threat of direct contact and contamination to surface water and soil by PCBs and pesticide wastes at inactive chemical waste storage facility.	Fencing. Sampling and analysis. Removal of liquid from loading docks. Solidincation and disposal of sludges, soil, and debns. Increase in security measures.	210.000
Jefferson Township: Laskin Poplar Oil*	Tanks overflowed, spilling waste oil contaminated with PCBs and phenois.	Pumping and capping of tanks. Dike stabilization. Drainage improvements. Installation of fencing.	1.562.000
Rock Creek: Old Mill" (Rock Creek Jack Webb)	Hazards from leaking drums of fuel oil, alcohols, phenois, and xylenes at abandoned hazardous waste lecility.	Sampling, analysis, and disposal of contaminants.	160.000
Pennsylvania Boyertown: Boyertown Scrap Metal	Contamination of soil: threat of direct contact, fire, and explosion from toluene, napthalene, and other chemicals in 30 drums at abandoned scrap metal facility. Residential area and trout hatchery within half-mile area.	Sempling of drum contents. Removal and disposal of drums and contaminated soil.	45.000
Bruin Borough: Bruin Lagoon"	Contamination threat to surface water, drinking water, and ecologically sensitive area by 2-6 million gallons of sludge and liquids contained in several lagoons on site of inactive surface impoundment and storage tank facility.	Berm stabilization. Lowering of lagoon levels, and diversion of overflow. Testing of nearby sources of drinking water.	20.000
Chester: Wade (ABM)*	Hazards from deteriorated drums of PCBs and crushed drums of acid and cvanide salts at inactive waste storage and disposal facility.	Site security. Sampling and analysis. Overpacking of leaking containers. Removal and disposal of contaminants.	265.000
Fallcroft: Tinucum Marsh	Contamination of surface water and soil and threat of direct contact posed by fire spreading to toxic waste dump.	Removal and disposal of contaminated soil and drums. Coverage of land with ity ash and clean full. Hydroseeding.	150.000
Glenside: Garage fire	Direct human contact with chlorine gas. Five gas cylinders burned and 2 leaked as result of tire in row of garages.	Securing and removal of gas cylinders.	50.000
Goshen: C & F Chemical	Soil contamination from 650 gallons of benzylchloride released from storage tank at operating chemical facility.	Disposal of all benzylchioride and contaminated soil.	65.000
Lock Haven: Drake Chemical Corp.*	Threat of fire, explosion, direct contact, and air contamination by process wastes and sludges contained in several hundred leaking drums at ahandoned chemical plant.	Area fencing, Removal and disposal of drums and bulk chemicals. Gas cylinder detonation.	950.000

[&]quot;Site is on current National Priorities List (NPL) of on proposed upons to NPL, NPL often are elegable for further room

^{**}Estimated CERCLA funding to communical continuous, some, and other federal equipment for removal activities only. Does one include costs for remodul responder, removal activities only. Does not include costs for remodul responder, remarch and coveragement, or other activities.

^{***}An immediate removal and planned removal at the same are, counsed as separate across. 29

Town Nather Sale Nation	Problem Environmental Three!	Action	Estimated Cost*
Morrisville: Vuicanized Rubber & Plastics Co.	Ground water, surface water, drinking water, and soil contamination, and threat of direct contact, fire, and explosion from abandoned factory located in densely populated area. Vandalism resulted in uncontrolled discharge of PCB transformer liquid.	Provision of site security by local solice. Solidification of drums. Transportation of liquids to incineration facility. Transportation of drummed and bulk soils to disposal facility. Backfill of exacuted areas with clean material.	120.000
Philadelphia: Midnight dumping	Direct contact threat from 2 sacks of a strong white powder base illegally dumped 20 feet from Schuylkill River. Two children suffered burns from truching powder.	Removal and disposal of materials.	2.000
Phoenixville: TLRCO Conungs	Threat of fire, explosion, direct contact, and soil contamination by volatile solvents in 550 drums.	Sampling and analysis. Removal of drums, underground tanks, and contaminated soil.	223,000
Stroudsburg: Brodhead Creek*	Contamination threat to surface water, drinking water, and aquatic life from 1.9 million gallons of coal tar material migrating into a creek from a waste lapon at an abandoned coal gasification plant.	Construction of slurry wall. Maintenance of filter fence.	440,000
Upper Marion Township: Beedler Road	threat of fire.	Air monitoring. Sampling of drum contents. Overpacking and removal o drums.	10.000 i
Westline: Westline site*	Contamination of surface water, soil, and air by tar seep containing phenois and other compounds migrating toward residential, commercial, and recreational properties. Also, threat of direct contact and threat to ecologically sensitive area.	Construction of security fencing by responsible party. Covering of tar and contaminated soil with synthetic membrane. Removal and disposal of ter sludge. Site capped, covered with clean fill, seeded, and mulched.	

Wiscomia

NO REMOVAL ACTIONS UNDER SUPERFUND

ource: Envisonment Reporter

[&]quot;Site is on current National Progress Last (NPL) or on proposed update to NPL NPL sites are stightle for further remotest estima.

^{**}Extracted CERCLA function to completened commissions utable, and utage federal aprecias for removal activities only. Since not include chies for removal incorporate, and convergence in other activities.

^{***} An immoviate restrict and planned removal of the same sea, constant is separate amount.

APPENDIX II

ADDITIONS TO THE NATIONAL PRIORITIES LIST

GREAT LAKES STATES

(48 FR 40658 September B, 1983)

Key: V = Voluntary or Negotiated Response; R = Federal and State Response;
E = Federal and State Enforcement; D = Actions to be Determined.
* = States' Designated Top Priority Sites.

Group refers to the NPL group with similar Hazard Ranking System scores.

	CDA.					
	EPA Regi	on State	Site Name	City/County	Response	Status
-	Grou					
	5 5	Wisconsin Ohio	Omega Hills North Landfill United Scrap Lead Co., Inc.	Germantown Troy	V	D
	Grou	ıp 2				
	5 5 5 2	Wisconsin Wisconsin Ohio Wisconsin New York	Janesville Old Landfill Janesville Ash Beds Miami County Incinerator Wheeler Pit Hudson River PCBs	Janesville Janesville Troy La Prarie Towns Hudson River	ship	D D D D
	Grou	з р 3				
	5 5 5 5 5	Minnesota Minnesota Wisconsin Minnesota Pennsylvania Wisconsin	St. Regis Paper Co. MacGillis & Gibbs/Bell & Pole Muskego Sanitary Landfill Boise Cascade/Onan/Medtronics Mill Creek Dump Schmalz Dump	Muskego	V R	D D D
	Gro	up 4				
	5 5 3 5 5 5 5	Wisconsin Ohio Pennsylvania Indiana Minnesota Minnesota Wisconsin	Master Disposal Service Landf South Point Plant Dorney Road Landfill Northside Sanitary Landfill Joslyn Mfg. and Supply Co. Arrowhead Refinery Co. Moss-American (Kerr-McGee)	ill Broomfield South Point Upper Macungie Zionsville Brooklyn Cente Hermantown Milwaukee		E D D D D

Group	5
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		8												
5 5 5 5 5 5 5 3 3 3 2 5	Wisconsin Indiana Wisconsin Minnesota Wisconsin Minnesota Michigan Minnesota Pennsylvania Pennsylvania Pennsylvania New York Minnesota	Kohler Co. Landfill Reilly Tar and Chemical Corp. Lauer I Sanitary Landfill Union Scrap Onalaska Municipal Landfill Nutting Truck and Caster Co. Sturgis Municipal Wells Washington County Landfill Henderson Road Industrial Lane Landfill East Mount Zion General Motors-Cent. Foundry Whittaker Corp.	Sheboygan Indianapolis Menomonee Falls Minneapolis Onalaska Faribault Sturgis Lake Elmo Upper Merion Twp. Williams Township Springettsbury Twp. Massena Minneapolis	R	Ε									
Group 6														
5 5 5 5	Wisconsin Minnesota Minnesota Indiana Wisconsin	Northern Engraving Co. Morris Arsenic Dump Perham Arsenic Poer Farm City Disposal Corp. Landfill	Sparta Morris Perham Hancock County Dunn	R		D D D								
Gro	up 7													
5 5 5 5 5 5 5 5	Minnesota Wisconsin Michigan Wisconsin Indiana Wisconsin Wisconsin Pennsylvania	General Mills/Henkel Corp. Eau Claire Muni Well Field Metamora Landfill Mid-State Disposal, Inc. American Chemical Service Lemberger Trans. & Recycling Scrap Processing Co., Inc. Walsh Landfill	Minneapolis Eau Claire City Metamora Cleveland Twp. Griffith Franklin Township Medford Honeybrook Twp.	R	E	D D D D								
Gro	oup 8													
5 5 5 3 5 5 5	Indiana Wisconsin Minnesota Pennsylvania Wisconsin Pennsylvania Ohio Michigan	Bennett Stone Quarry Waste Research & Reclamation St. Louis River Berks Sand Pit Oconomowoc Electroplating Co. Taylor Borough Dump Powell Road Landfill Burrows Sanitation	Bloomington Eau Claire V St. Louis County Longswamp Twp. Ashippin Taylor Borough Dayton Hartford	R R	E	D D D								
Gro	oup 9	•												
	Wisconsin	Delavan Municipal Well #4	Delavan			D								
5	wiscousin	Delayan unuitabat well #4	popular uni			-								

Appendix III
GREAT LAKES STATES HAZARDOUS WASTE SUPERFUNDS

STATE	FU	D SO	JRCE	5	_	_	FUND USES												OTHER			
	Facility Fees	Generator Fees	Transporter Fees	Appropriations	Reimbursements	Penalties/Fines	Bonds	Other	Emergency Response	Remedial Action	Perpetual Care	Site Monitoring	CERCLA Match	Natural Resource Damage	Studies	Site Inventories	Equipment/Training	Fund Limit	Liability Standards	Victim Compensation	Statutory Citations or Session Laws for Each Great Lakes State	
Illinois	x	8		×					x	x					×						Hazardous Waste Trust Fund, Ill. ANN. STAT. CH. 111 1/2 (1022.2	
Indiana-l	x								x	×			×					×			Hazardous Substances Emergency Response Trust Fund, IND. CODE ANY \$13-7-8.7-1 to -6; 6-6-6.1 to -3	
Indiana-2	x					×			×												Environmental Management Special Fund, IND. CODE ANN. § 13-7-8.6-4: 13-7-12-3; 13-7-13-1, -2	
Indiana-3	x																x				Hazardous Waste Training Trust Fur IND. CODE ANN. \$12-7-8.6-11	
Michigan-1	x												×					×	x		Disposal Facility Trust Fund, MICH. STAT. ANN. 13.30(41)(42)	
Michigan-2				×	T				x												MICH. STAT. ANN. (\$13.30(43)	
Minnesota	x	×		x	×	х			×	×			×	×	×				×		Environmental Response, Compand Compliance Fund, MINN. 5	
New York	x	×		x	x	×			×	×			×			x		x	×		Hazardous Waste Remedial Fund, N. ENVTL. CONSERV. LAW \$17-901, -091 -0923, 1301 to -1319; 71-2723, -2725, N.Y. PUB. HEALTH LAW \$1389	
Ohio	x			×	×			×	2	×		×				x			×		Hazardous Waste Clean-up Special Account, OHIO REV. CODE ANN. \$3734.13 to .28	
Pennylvania	×				T	×	×		x	×	×										Solid Waste Abatement Fund, 35 PA CONS. STAT. ANN. \$6018.104(77), 505(a-d)605606701	
Wisconsin-1	×			1	x			T	x	×	×			×				×			Waste Management Fund, WIS. STAT.	
Wisconsin-2				×	×				×								1				Hazardous Substance Spill Fund, WIS. STAT. ANN. § 144.76	

Source: National Conference of State Legislatures, Hazardous Waste Management: A Survey of State Legislation, 1982, (1982); Office of Technology Assessment, Technologies and Management Strategies for Hazardous Waste Control, p. 639, (1983); Environmental Law Institute, Environmental Law Reporter, ELR 10358-60, (1983).