



THE UNIVERSITY OF TENNESSEE
**ENVIRONMENTAL TECHNICAL
ASSISTANCE GROUP**



TENNESSEE SUPERFUND PROGRAM
OVERVIEW, RULES, REGULATIONS & LIST

sponsored by
UT's Institute for Public Service and Continuing Education
and its agencies
County Technical Assistance Service
Municipal Technical Advisory Service
and the
Tennessee Department of Health and Environment

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ENVIRONMENTAL TECHNICAL ASSISTANCE GROUP

On October 1, 1986, The University of Tennessee Institute for Public Service was awarded an Environmental Management Technical Assistance Program Grant from the Tennessee Department of Health and Environment. With these funds, the Institute and its agencies, the Center for Government Training, County Technical Assistance Service and Municipal Technical Advisory Service, provide Tennessee cities and counties with technical assistance on hazardous waste dump site cleanup projects.

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January 5, 1987

Dear Local Government Official:

Inactive hazardous waste dump sites are located in numerous communities across the State of Tennessee. As a result, many local government officials will eventually become directly or indirectly involved in dealing with hazardous waste dump site cleanup in their jurisdictions.

Through cooperative efforts of The University of Tennessee's Institute for Public Service and two of its agencies, the Municipal Technical Advisory Service and the County Technical Assistance Service, the University has entered into an agreement with the State of Tennessee Department of Health and Environment to offer technical assistance to local governments facing abandoned hazardous waste dump site problems. The "Environmental Technical Assistance Group" has been formed to assist both counties and cities facing these waste problems.

In an attempt to provide you with current information and regulations concerning inactive hazardous waste dump sites and an explanation of the ongoing Federal and State Superfund cleanup processes, the Environmental Technical Assistance Group in cooperation with the Tennessee Department of Health and Environment, Division of Superfund and a third Institute for Public Service agency, the Center for Government Training, are providing three Superfund workshops across the State. The workshops are to be held in Jackson, Nashville and Knoxville in late January.

This publication, "Tennessee Superfund Program", prepared by Randy Williams, Project Manager of the Environmental Technical Assistance Group, transmits information that will be provided at the workshops to hopefully provide you with a better understanding of the Federal and State Superfund processes.

If you have any questions or input concerning this program, please contact Randy Williams at 615-256-8141 at your convenience.

Thank you for your continuing support and input.

Sincerely,



Thomas B. Ballard
Executive Director

TENNESSEE SUPERFUND PROGRAM
OVERVIEW, RULES, REGULATIONS & LIST

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ENVIRONMENTAL TECHNICAL ASSISTANCE GROUP

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I. NARRATIVE

PREFACE

This guidance document was developed by the University of Tennessee, Environmental Technical Assistance group. It is intended to assist in furthering the understanding of Local Government officials and others concerning Federal and State Hazardous Waste Superfund regulations, issues and procedures.

This document incorporates regulations and procedures already in use by the United States Environmental Protection Agency and the State of Tennessee Department of Health and Environment and attempts to demonstrate where they parallel.

The document includes excerpts or adaptations from the following documents:

The Role of local Government in Hazardous Waste Management prepared by GRCDA for U.S. EPA under grant no X810350.

Tennessee Department of Health and Environment Division of Superfund Legislative Report, Prepared by TDH&E Division of Superfund Staff, December, 1985.

Hazardous Materials in North Carolina; A Guide for Decision-makers in Local Government, Prepared by Center for Urban and Regional Studies, University of North Carolina-Chapel Hill; Institute for Environmental Studies, University of North Carolina-Chapel Hill; The Conservation Foundation of North Carolina; 1985.

"Hazardous Wastes: Not In My Backyard" article from American City and County, Feb., 1984 p. 24.

In general, a hazardous material is any substance that could damage public health or the environment if it is not handled properly. Hazardous materials include those substances that are:

Ignitable: Capable of burning or causing a fire. Examples include acetone, gasoline, industrial alcohols.

Corrosive: Capable of eating away other materials and human tissue. Examples include acids and alkaline cleaners.

Reactive: Capable of interacting explosively with air or water and releasing poisonous fumes. Examples include cyanide, chlorine, and obsolete munitions.

Toxic: Capable of poisoning humans. Examples include arsenic and pesticides.

A hazardous waste is a hazardous material that has been discarded. Most media attention and government regulation has focused on hazardous waste because it is more likely to be improperly handled. However, there are far greater quantities of hazardous materials being used in and transported through most communities every day than there are hazardous wastes.

The Resource Conservation and Recovery Act (RCRA), passed by Congress in 1976, established a Regulatory System to track hazardous wastes from the time of generation to disposal or treatment (cradle to grave). It also requires safe and secure

procedures to be used in treating, storing, and disposing of hazardous wastes. RCRA is designed to prevent the creation of future hazardous waste problems such as Love Canal. It does not authorize the government to respond directly to the problems caused by improper hazardous waste disposal sites already in existence which are now inactive or closed.

The provisions of RCRA provided for federal financial assistance to state government so they could develop the legislation, regulations and resources for a state hazardous waste management program suitable to assume the responsibility of RCRA. This assumption of the responsibilities of RCRA is referred to as Authorization. The State of Tennessee began working on authorization upon passage of the Tennessee Hazardous Waste Management Act of 1977. A phased authorization process was established by EPA. Because the hazardous waste management regulations to be developed by EPA were so complex and unique the development of EPA's regulations and the States regulations has taken more than six years.

The Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) of 1980, better known as the Federal Superfund Law, authorized the Federal Government to respond directly to releases or threatened releases of hazardous substances, pollutants or contaminants that may endanger public health or welfare. Costs for the first five years were covered by a \$1.6 Billion fund, 86 percent of which was financed by taxes on the manufacture or import of certain chemicals and petroleum, the

remaining coming from the general revenues. A new 1986 appropriation bill has been passed by Congress which extends the Superfund for five years at a funding level of 8.5 billion dollars. Again more than 80 percent of the financing would be expected from import chemical and petroleum taxes. A small percentage of the funds will come from interest and cost recovery from responsible parties. Responsible parties include owners, operators, generators and transporters involved in the disposal of hazardous substances at Superfund sites. The Superfund is reimbursable: the government generally can take legal action to recover its cleanup costs from those identified as responsible parties. Anyone liable for a release who fails to take ordered action may be liable for punitive damages equal to three times the government's response costs.

The Tennessee Hazardous Waste Management Act of 1983, informally referred to as Tennessee Superfund Law, went into effect on July 1, 1983. The major purpose of the law was to facilitate identification, investigation, containment and clean up including monitoring and maintenance of inactive hazardous substance sites in Tennessee through the creation of a State Superfund Program.

The State program somewhat parallels the federal Superfund program. The State will concentrate on clean-up of situations that would not rank high enough to be placed on the Federal Superfund list (NPL-National priority List). Also, in most cases the State and Federal Superfund programs will work in tandem to

compliment each other to accomplish hazardous substance site clean-up.

The Tennessee Superfund Law establishes a system to fund the program through fees levied on hazardous waste generators and transporters to be matched (or more than matched) by allocations from the State General Fund. The level of funding is designated to maintain an unobligated balance of three million dollars (\$3,000,000) to five million dollars (\$5,000,000) in what is called the "Hazardous Waste Remedial Action Fund." The law establishes definitions for responsible parties to include owners, operators, generators, and transporters involved in the disposal of hazardous substances at Superfund sites. It clearly defines the State's authority to issue commissioner's orders to responsible parties requiring investigation , containment and clean-up including monitoring and maintenance of inactive hazardous substance sites in the State. The law also establishes that the Commissioner of Health and Environment is authorized to act immediately in emergency situations. Finally, the law requires the State Attorney General to recover from responsible parties all funds spent on inactive hazardous substance sites and imposes punitive damages of 150% of the expended amount for uncooperative responsible parties. The attorney General also has authority to place liens on property of responsible parties to recover costs. Other civil and criminal penalties are specified for failure to act or falsifying records or reports by responsible parties.

Both the State and the Federal Superfund program are built on the recognition that responses and cleanups must be tailored to the specific needs of each site or each release of hazardous substance. The EPA and the State's strong enforcement efforts seek to ensure that private responsible parties finance cleanup actions when possible. The State will also encourage EPA to take the lead in expensive cleanups within Tennessee because of the limited financing of the State Remedial Action Fund. Direct Federal or State government action can take the following forms:

Immediate removals, when a prompt response is needed to prevent harm to public health or welfare or the environment. For example, immediate removals may be ordered to avert fires or explosions, to prevent exposure to acutely toxic substances, or to protect a drinking water supply from contamination. Actions may include the installation of security fencing, the construction of physical barriers to control the discharge, or the removal of hazardous substances off the site. Ordinarily immediate removals are limited by law to twelve months and a total cost of \$2 million.

Planned removals, when an expedited, but not necessarily immediate, response is needed, these actions are intended to minimize increases in danger or exposure that would otherwise occur if response were delayed. Planned removals are subject to the same time and cost limits as immediate removals.

Remedial Actions, are longer term and usually more expensive, aimed at permanent remedies. They may be taken only at sites identified as national priorities (EPA Superfund listed) or on the State's Eligible Sites List (State Superfund List) when the remedial action is performed under the State Superfund. Specific actions may include the removal of drums containing wastes from the site, the installation of a clay "cap" over the site, the construction of ditches and dikes to control surface water or drains, liners, and grout "curtains" to control groundwater, the provision of an alternate water supply, or the temporary or permanent relocation of residents.

An important part of the Superfund Program effort is to encourage voluntary cleanups by private industries and individuals when they are responsible for releases. In fact, since the full extent of the problem has become understood, millions of dollars have been spent by industry for cleanup, as well as for the retrofitting of existing facilities. A total of \$33 million has been spent in Tennessee since March, 1983 on hazardous substance site cleanup. More than one-third of the expenditure was by responsible parties, mainly industries. Additionally, industrial research and development has resulted in significant advances in hazardous waste control technologies.

Working with the local community is a key aspect of every State or Federal Superfund response. At each site, officials responsible for technical work are required to ensure that local

citizens' and officials' concerns are taken into account in the development of solutions, and that information about the site is widely distributed.

This is where the University of Tennessee Environmental Technical Assistance Program can assist the State and local community by facilitation of communication between the Tennessee Department of Health and Environment and Local Government; facilitation and assistance in encouraging appropriate public participation in the Superfund process; briefing of local officials on Superfund issues and regulations to further their understanding of hazardous waste problems and State priority ranking and listing procedures; participation and negotiation with State and Local officials on plans of Resolution of Hazardous Waste problems; providing awareness and educational workshops about Superfund and other hazardous waste matters and to participate and assist the Tennessee Municipal League and the Tennessee County Services Association in development of appropriate environmental policy to help local government deal more effectively with hazardous waste issues as they arise.

The new \$8.5 billion Federal Superfund is a large amount of money. However, the available Superfund monies will only cover a small fraction of the projected cost to clean all of the approximate 800 abandoned Superfund sites in the U.S. EPA estimates that cost will be somewhere between \$28 billion to \$55 billion. The Tennessee Superfund (Remedial Action Fund) amount of only \$5 million will not come close to cleaning up the more than 250

sites already on the Tennessee Superfund list.

Because of the tremendous amount of funds needed and the scarce amount of funds available both State and Federal, the laws specify that Superfund money can be spent only under carefully prescribed conditions. For example, neither State or Federal Superfund financed responses may be taken if EPA or the State determines that the owner, operator or other responsible party is undertaking an appropriate cleanup. Immediate and planned removals are limited in cost and duration to only bring a release of hazardous substance under control. Response under Superfund is not authorized in specific situations that may be covered by other laws. The law requires that wherever possible, the remedy selected should avoid the costly step of excavating hazardous wastes and transporting them off the site for disposal. The benefits to be derived from continued work at a remedial action site must be weighed against the benefits of working at other sites. The extent of the above conditions are to derive the maximum benefit from State and Federal Superfund programs for the State and the nation as a whole.

The Superfund program is a coordinated effort of the Federal Government, State and Local governments, private industry, and citizens. Implementation of Federal and State Superfund programs have been a slow and rather complex effort. With the Federal and State government committed to the theory of "the polluter pays" determinations of when to utilize Federal or State Superfund dollars are not easy. In addition, the sites offer very complex

technical challenges. What is in the sites? What is the nature of the wastes? Is the site polluting groundwater? Whose wastes are in the sites? What are the best technical fixes that can be used? These are tough questions; the answers are not easy; and implementing the answers is challenging and expensive.

The most prevalent sources for sites that would be potential candidates on State or Federal Superfund lists are:

- (1) Abandoned dumps, farms or properties.
- (2) Former municipal disposal facilities that accepted hazardous wastes.
- (3) Inactive areas of existing disposal facilities.
- (4) Inactive lagoons at existing industrial facilities.
- (5) Contaminated water supply well fields.
- (6) Roadway and unpaved areas covered with contaminated oils.
- (7) Properties overspread with radioactive fill.
- (8) Shut down oil refineries.
- (9) Abandoned oil terminals.

The Tennessee Department of Health and Environment has developed an assessment model based on the EPA Hazardous Ranking System to be used to set priorities for remedial action at the 263 listed sites on the State Superfund list (State Eligible List). The main modification to the EPA model has been an added emphasis on environmental damage and the inclusion of an immediate threat factor in the overall score. The Tennessee Hazardous Ranking System (THRS) is a means for applying uniform technical

judgement regarding the potential hazards presented by a site relative to other sites. It does not address the feasibility, desirability, or degree of cleanup required.

The THRS score is based on four potential pathways of exposure to the human population or a sensitive environment: Groundwater, surface water, air or direct contact including fire and explosion,. The score represents an analysis of the probability and magnitude of harm to the human population or environment from exposure to hazardous substances.

To be placed on the State Superfund "Eligible Sites List" a site must be one which meets two criteria: (1) it is an inactive hazardous substance site and (2) it poses or may reasonably be anticipated to pose a danger to public health, safety and environment.

If a site is reported to or discovered by the Tennessee Department of Health and Environment to be suspected of containing or being contaminated with hazardous substances the following steps may be taken: (See Flowchart Exhibit A)

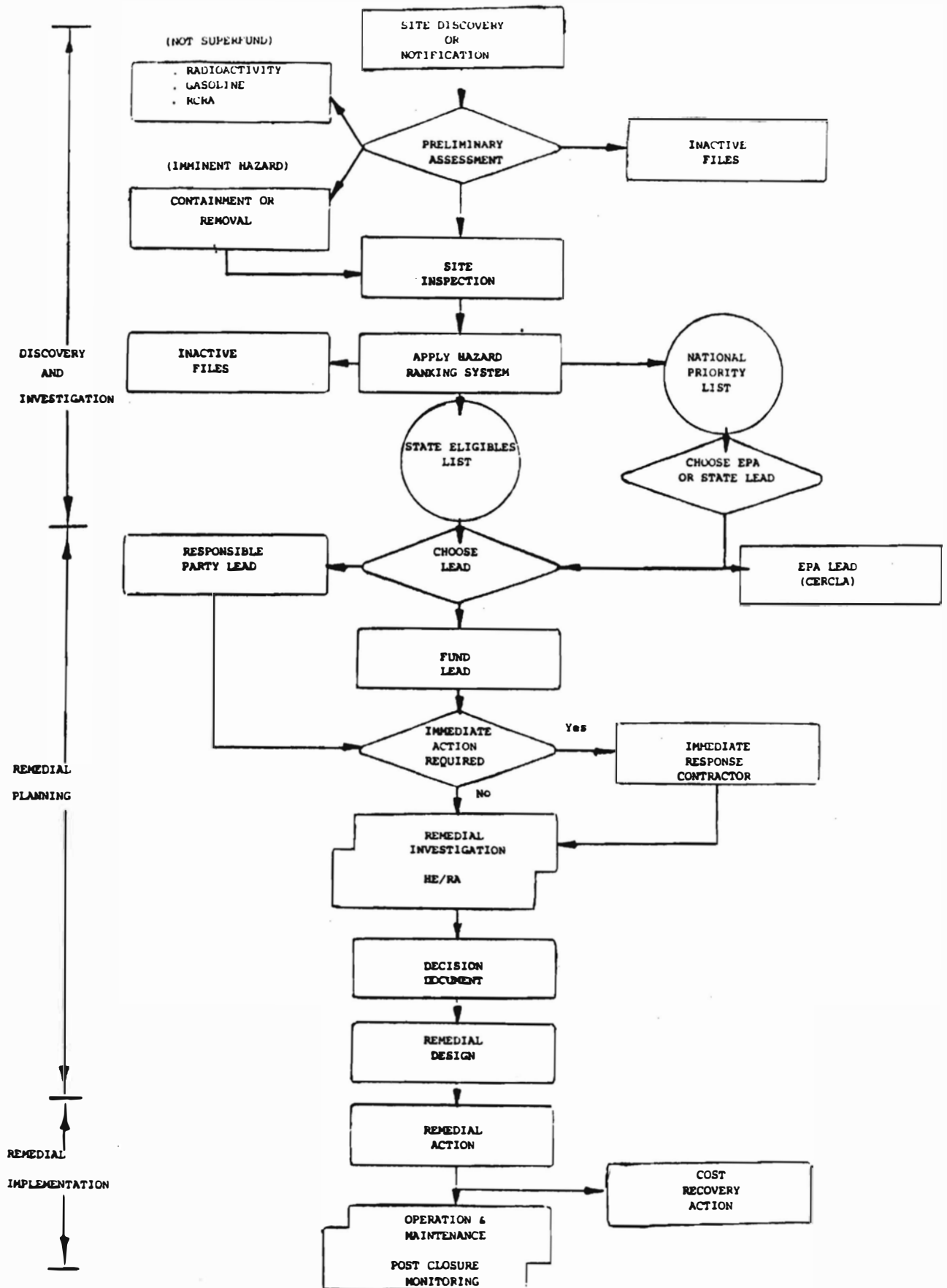
Preliminary Assessment is a cursory review of readily accessible data involving research of files, discussion with Department staff, and contact with liable parties. It may or may not include a site visit.

Site Inspection is an on-site inspection of a site to secondarily assess the potential hazard to public health, safety, and environment, to identify factors which may have

EXHIBIT A

REMEDIAL PROCESS

TENNESSEE STATE SUPERFUND



been missed by the preliminary assessment step, and to determine if the site merits further investigation. This inspection may include a relatively simple sampling program, field measurements, or other limited types of investigation.

Further investigation involves sampling, testing, research and other methods used to definitively assess the degree of hazard posed by a site and to develop design criteria for remedial actions. This step may include a determination made that remedial actions or on-going monitoring and maintenance efforts are necessary.

Remedial Action Underway refers to the actual corrective measures taken to mitigate the hazard associated with a site.

Remedial Action Completed/Cost Recovery Pending is the step where remedial action efforts have been completed and a determination made that continued listing is necessary for recovery of costs pursuant to the Act.

Monitoring and Maintenance On-Going are those activities necessary to either determine the necessity of further investigation or to ensure the effectiveness of remedial action conducted to date. Maintenance includes regular upkeep of the site (seeding, mowing, erosion control, etc.) and regular cleaning and repairing of monitoring equipment. Monitoring includes several activities ranging from simple

on-site inspections to complex ground-water monitoring.

Since 1983 a site discovery program has been implemented by the Tennessee Department of Health and Environment by using citizen complaints, industrial leads, information from other state programs, industrial surveys and the toll free Superfund Hotline (1-800-251-3479). As of January 1, 1986 a total master list of 862 suspected inactive hazardous substance sites have been identified in Tennessee. As of January 1, 1986 a total of 263 sites have been found to be ones which "pose or may reasonably be anticipated to pose a danger to public health, safety and environment", therefore qualifying them for the State Superfund "Eligible Sites List". This is the promulgated list of sites which are eligible for State Superfund expenditures. The expenditures may be for staff time and sampling necessary for overview of a project or complete funding of all activities where responsible parties are unable or unwilling to conduct the work and EPA cannot provide assistance. There are 120 hazardous substance sites located on Federal facilities that are listed on the State Superfund list that are being addressed by either the Department of Energy or the Department of Defense Installation Restoration Program (IRP). As of October 1, 1986 approximately \$2 million has been spent from the State Remedial Action fund (State Superfund) for hazardous substance cleanup in Tennessee. It will take many years to complete full assessments of all suspected sites and longer to provide proper containment or cleanup.

The Tennessee Department of Health and Environment Division of Superfund is composed of 28 staff members including five geologists, six environmental engineers, five chemists and one toxicologist. Division of Superfund has field offices located in Jackson, Chattanooga and Knoxville as well as Nashville. The Superfund Division has only been in operation for about three years. The problem is enormous but the authority of the Tennessee Superfund Law; the efforts of the State Superfund Staff along with other affiliated State programs and the cooperation of responsible parties should establish a means of mitigating the hazards providing for a safer and cleaner Tennessee.

II. HAZARDOUS WASTE MANAGEMENT ACT OF 1983 (Part 2)
 (Tennessee Superfund Law) TCA 68-46-201 - TCA 68-46-221

CHAPTER 46

HAZARDOUS WASTE MANAGEMENT

SECTION.

PART 2—HAZARDOUS WASTE MANAGEMENT ACT OF 1983

- 66-46-201. Legislative intent.
- 66-46-202. Definitions.
- 66-46-203. Remedial action fees.
- 66-46-204. Hazardous waste remedial action fund.
- 66-46-205. Uses of fund.
- 66-46-206. Powers and duties of commissioner.
- 66-46-207. Liability for costs, expenditures, and damages.
- 66-46-208. Authority of counties.
- 66-46-209. Liens on property.
- 66-46-210. Responsible waste disposal incentive fund.
- 66-46-211. Local government fees — State hazardous waste management fee.
- 66-46-212. Annual reports — Public hearings — Toll-free number — Notice to register of deeds.
- 66-46-213. Violations — Criminal and civil penalties.
- 66-46-214. Jurisdiction for civil proceedings.
- 66-46-215. Enforcement.
- 66-46-216. Right of entry by commissioner — Penalties.
- 66-46-217. Landfill permits — Public hearings.
- 66-46-218. Landfill permits — Denial for past convictions.
- 66-46-219. Landfill permits — Approval by county.
- 66-46-220. Local authority unaffected.
- 66-46-221. Fees additional to other fees and taxes.

(D) Any transporter of hazardous substance which is disposed of at an inactive hazardous substance site who, at the time of disposal, selected the site of disposal of such substance.

(5) All other terms used in this part shall be defined as such terms are defined in § 68-46-104. [Acts 1983, ch. 423, § 2.]

Compiler's Notes. Section 101 of Public Law 96-510, referred to in this section, is codified as 42 U.S.C. § 9601.

commercial facilities notwithstanding this section, § 68-46-108.

Cross-References. Facilities deemed not

Section to Section References. This section is referred to in §§ 68-46-108, 68-46-207.

68-46-203. Remedial action fees. — (a) For fiscal year 1983-1984 there is levied a remedial action fee on the generation and management of hazardous waste in a sum sufficient to produce total revenue of one million dollars (\$1,000,000). The board shall promulgate a fee structure sufficient to produce such revenue, and revenue required in subsequent years by subsection (e) in accordance with the following:

(1) The maximum amount of the remedial action fee for generators shall not exceed seven thousand five hundred dollars (\$7,500), and the minimum amount of such fee shall not be less than three hundred dollars (\$300). Such fees shall be set by the board upon a scale based on size classification of the generator as determined by waste generated during the prior fiscal year. Such fees shall also be structured by the board to encourage recycling of hazardous wastes by imposing lower fees on generators who recycle hazardous wastes. Such fees shall also be structured by the board to discourage land disposal of certain hazardous wastes by imposing higher fees on those who produce extremely hazardous substances that are to be landfilled;

(2) In addition to the above fee, there shall be collected from those generators who ship hazardous waste off-site for treatment or disposal a fee for each ton so shipped which shall not exceed seven dollars (\$7.00) nor be less than two dollars (\$2.00) for each ton so shipped; and

(3) The remedial action fee collected from any permitted transporter shall not be less than one hundred dollars (\$100) nor more than two hundred seventy-five dollars (\$275).

(b)(1) No fees shall be assessed or payable on any hazardous waste which is received by any publicly owned treatment works or any wastewater treatment plant permitted pursuant to Section 402 of the Clean Water Act as amended (PL 92-500) or the Tennessee Water Quality Control Act, § 68-3-101 et seq.

(2) No fees shall be assessed or payable on:

(A) Sludge from publicly owned treatment works located in the state, as defined in rules adopted by the board;

(B) Bottom boiler ash and flyash from incinerators which process solely municipal waste, as defined in rules adopted by the board;

(C) Hazardous wastes beneficially used or reused or legitimately recycled or reclaimed, as authorized by board regulations; or

(D) Any waste material exempted from regulation pursuant to Tennessee department of health and environment, Rule 1200-1-11-.02(1)(d)(3).

(c) Interest accruing on investments and deposits of the fund shall be returned to the fund and remain a part of the fund.

(d) All fees, civil penalties and fines collected pursuant to this part and all fines and civil penalties collected pursuant to part 1 of this chapter shall be deposited in the fund; provided, however, that no fees collected pursuant to § 66-46-110 shall be deposited in the fund.

(e) All funds received by the state pursuant to Section 3012 of the Resource Conservation and Recovery Act as amended, shall be deposited in the fund. Such funds shall not be construed to constitute the required dollar for dollar match by the state pursuant to § 66-46-203(f). [Acts 1983, ch. 423, § 4.]

Compiler's Notes. The Resource Conservation and Recovery Act, referred to in this section, is codified as 42 U.S.C. § 6901 et seq.

For transfer of responsibility for collecting fees for the hazardous waste remedial action

fund from the department of revenue to the department of health and environment, see Executive Order No. 53 (September 9, 1983).

Section to Section References. This section is referred to in § 66-46-203.

66-46-205. Uses of fund. — (a) The fund shall be available to the board and the commissioner for the purposes of identifying and investigating inactive hazardous substance sites for consideration for placement on the list described in § 66-46-206(e) and for investigating and reasonably and safely containing, cleaning up, monitoring, and maintaining such sites as provided in this part.

(b) The commissioner may enter into such contracts and use the fund for those purposes directly associated with identification, investigation, containment and cleanup, including monitoring and maintenance prescribed above including:

- (1) Hiring of consultants and personnel;
- (2) Purchase, lease or rental of necessary equipment; and/or
- (3) Other necessary expenses.

Provided, however, that such fund shall not be used for hiring personnel for continuing programs of the department of health and environment pursuant to part 1 of this chapter or for any ongoing or long term research activities.

(c) Such fund may also be used for matching the funds of any federal agency, pursuant to Section 104 (c) of Public Law 96-510, to enable the state to receive federal funds to clean up hazardous substance sites, or providing for state financed cleanup. [Acts 1983, ch. 423, § 5; 1986, ch. 644, § 12.]

Compiler's Notes. Section 104 of Public Law 96-510, referred to in this section, is codified as 42 U.S.C. § 9604.

Amendments. The 1986 amendment substituted the present provisions in (a) for those which read: "The fund shall be available to the board and the commissioner for expenditures solely for the purposes of providing for the investigation, identification and for the reason-

able and safe containment and cleanup, including monitoring and maintenance, of inactive hazardous substance sites within the state as provided in this part."

Effective Dates. July 1, 1986. Acts 1986, ch. 644, § 20, also provided that the 1986 amendment by that act take effect April 1, 1986, for rulemaking purposes.

(3) The nature of the danger to the public health, safety, and the environment posed by the hazardous substance at the site; and

(4) The extent to which each alternative would achieve the goal of this subsection.

To the extent practicable, any such investigation, identification, containment and clean-up, including monitoring and maintenance, shall be consistent with the national contingency plan promulgated pursuant to Section 105 of Public Law 96-510.

(e) Whenever necessary to protect the public health, safety, or the environment, but at least annually, the commissioner shall propose and the board shall promulgate, in accordance with the provisions of the Uniform Administrative Procedures Act, compiled in title 4, chapter 5, any necessary revisions to the list of those inactive hazardous substance sites within the state that are eligible for investigation, identification, containment, and clean-up, including monitoring and maintenance, and that pose or may reasonably be anticipated to pose a danger to public health, safety, or the environment. [Acts 1983, ch. 423, § 6; 1986, ch. 644, §§ 13, 14.]

Compiler's Notes. Section 105 of Public Law 96-510, referred to in this section, is codified as 42 U.S.C. § 9605.

Amendments. The 1986 amendment substituted the present provisions in (a) and (e) for those which read: "(a) The commissioner is authorized to issue an order to any liable party requiring such party to investigate, identify, contain, and clean-up, including monitoring and maintenance, inactive hazardous substance sites which pose or may pose a danger to public health, safety or the environment because of the release or threatened release of hazardous substances. Any person failing, neglecting, or refusing to comply with any final order shall be subject to the penalties provided in §§ 68-46-207 and 68-46-213.

"(e) The commissioner shall propose, and the

board shall promulgate, after opportunity for public comment, a list of those inactive hazardous substance sites within the state that are eligible for investigation, identification, containment and clean-up, including monitoring and maintenance, and that pose or may reasonably be anticipated to pose a danger to public health, safety and environment. Such list shall be revised or repromulgated at least annually by the board."

Effective Dates. July 1, 1986. Acts 1986, ch. 644, § 20, also provided that the 1986 amendment by that act take effect April 1, 1986, for rulemaking purposes.

Section to Section References. This section is referred to in §§ 68-46-205, 68-46-207, 68-46-209.

68-46-207. Liability for costs, expenditures, and damages. — (a) Liable parties shall be liable to the state for costs of investigation, identification, containment and clean-up, including monitoring and maintenance, as provided herein.

(b)(1)(A) Making use of any and all appropriate existing state legal remedies, the attorney general shall act to recover the amounts expended by the state pursuant to § 68-46-206 from any and all identified liable parties as defined in § 68-46-202 for each site investigated, identified, contained, or cleaned up, including monitoring and maintenance. In any action under this part or any other law, a liable party shall be liable for that party's apportioned share of the amount expended as determined on the basis of equitable principles, taking into account, but not limiting consideration to, the following factors:

(i) Any monetary or other benefits accruing to each liable party from the disposal of hazardous substances upon the site;

Compiler's Notes. The Federal Insecticide, Fungicide, and Rodenticide Act, referred to in this section, is codified as 7 U.S.C. § 136 et seq.

Amendments. The 1986 amendment substituted the present provisions in (b)(1) for those which read: "Making use of any and all appropriate existing state legal remedies, the attorney general shall act to recover the amount expended by the state pursuant to § 68-46-206 from any and all identified liable parties for each site investigated, identified, contained or cleaned up, including monitoring and maintenance. In any action under this part or any other law, no liable party shall be liable for more than that party's apportioned share of the amount expended from the fund for such site. Such apportioned share shall be based solely on a liable party's portion of the total volume of

the hazardous substance at the hazardous substance site at the time of action taken under this part. Any expenditures required by the provisions of this part made by a liable party (before or after suit) shall be credited toward any such apportioned share."; and deleted (b)(4) which read: "If the trier of fact finds the evidence insufficient to establish each party's portion of costs or expenditures, the court shall apportion such costs or expenditures, to the extent practicable, according to equitable principles, among the defendants."

Effective Dates. July 1, 1986. Acts 1986, ch. 644, § 20, also provided that the 1986 amendment by that act take effect April 1, 1986, for rulemaking purposes.

Section to Section References. This section is referred to in § 68-46-206.

68-46-208. Authority of counties. — (a) The county executive and four (4) members of the county legislative body appointed by the county executive of the county in which any commercial facility is located may accompany the department upon any site investigation or monitoring inspection.

(b) The county legislative body of the county in which any commercial facility is located may by a majority vote of the members to which it is entitled require that independent monitoring tests be conducted. Such tests shall be conducted by a laboratory which is certified to conduct tests for safe drinking water by the Tennessee department of health and environment or the federal environmental protection agency under the authority of the Safe Drinking Water Act. All such tests shall be paid for by such county. [Acts 1983, ch. 423, § 8.]

Compiler's Notes. Concerning the Safe Drinking Water Act referred to in subsection (b), the federal act by that name is compiled in U.S.C. in various sections throughout titles 5, 21, and 42, and the Tennessee act of the same

name is codified in part 7, chapter 13 of this title.

Section to Section References. This section is referred to in § 68-46-210.

68-46-209. Liens on property. — (a) Whenever a hazardous substance site is placed on the list of hazardous substance sites pursuant to § 68-46-206(e), or whenever the commissioner otherwise begins to expend money for investigation, identification, containment or clean-up of a particular site under this part, the commissioner may file a notice with the office of the register of deeds of the county in which the property lies.

(b) Within one (1) year after the completion of a project to contain or clean up the hazardous substance at a particular site under this part, the commissioner shall itemize the money so expended and shall file a statement thereof in the office of the register of deeds of the county in which the property lies, together with notarized appraisals by an independent appraiser of the value of the property before and after the clean-up work performed at the site, if the money so expended shall result in a significant increase in property values. Such statement shall constitute a lien upon such land. The lien shall not exceed the amount determined by the appraisal to be the increase in the market value of the property as a result of the clean-up work.

(b) There is appropriated to the responsible waste disposal incentive fund the sum of five hundred thousand dollars (\$500,000) for fiscal year 1983-1984 and there shall be appropriated the sum of one million five hundred thousand dollars (\$1,500,000) for fiscal year 1984-1985.

(c) Interest accruing on investments and deposits of such fund shall be returned to it and remain a part of such fund.

(d) Any unencumbered and any unexpended balance of this fund remaining at the end of any fiscal year shall not revert to the general fund, but shall be carried forward until expended in accordance with the provisions of this section.

(e)(1) The board shall promulgate rules and regulations in accordance with the provisions of the Uniform Administrative Procedures Act, title 4, chapter 5, to establish eligibility requirements for a local government to receive the money deposited in the responsible waste disposal incentive fund.

(2) At a minimum, for a local government to be eligible to receive such funds, the commercial facility must be located within the jurisdiction of such local government, such facility must have a permit to operate pursuant to the provisions of § 68-46-108, such facility must be constructed and operational and the following standards must be met:

(A) The facility is multi-purpose with both land disposal capability and facilities for advanced technology, high-temperature thermal treatment;

(B) The facility has a minimum design capacity to operate for twenty (20) years;

(C) The facility is operated pursuant to the provisions of part 1 of this chapter; and

(D) The local government with jurisdiction over the facility does not have any zoning requirement, subdivision regulation, ordinance, regulation or other provision of law which is more stringent than state law regarding the location and operation of the facility.

(3) The board shall distribute the money in the responsible waste disposal incentive fund to the first local government which applies for such fund and which meets the requirements of this section and regulations promulgated pursuant thereto. If the facility is located in the jurisdiction of more than one (1) local government, the money shall be apportioned between the eligible governments. At the time of distribution of such funds, the responsible waste disposal fund shall cease to exist and no further appropriations pursuant to subsection (b) shall be made.

(4) Twenty-five percent (25%) of the funds distributed to the local government shall be earmarked for conducting tests pursuant to § 68-46-208 and for monitoring, assessing, and abating health risks and hazards associated with the commercial facility. [Acts 1983, ch. 423, § 10.]

Section to Section References. This section is referred to in § 68-46-211.

Amendments. The 1986 amendment in (a) substituted "October 1" for "June 30."

Effective Dates. July 1, 1986. Acts 1986, ch. 644, § 20, also provided that the 1986 amendment by that act take effect April 1, 1986, for rulemaking purposes.

Attorney General Opinions. Extension of annual report submission deadline. OAG 84-206 (6/27/84).

68-46-213. Violations — Criminal and civil penalties. — Any person who fails to pay the fees authorized by this part; who fails to file any reports, records or documents required pursuant to this part; who fails, neglects, or refuses to comply with any order issued pursuant to this part; or who knowingly gives or causes to be given any false information in any reports, records, or documents required pursuant to this part shall be subject to a fine of up to ten thousand dollars (\$10,000) or imprisonment of up to eleven (11) months and twenty-nine (29) days, or both. In addition, such person shall be subject to a civil penalty of up to ten thousand dollars (\$10,000) and, if appropriate, the original fee plus interest. Each day such violation continues shall constitute a separate offense. [Acts 1983, ch. 423, § 13; 1986, ch. 644, § 18.]

Amendments. The 1986 amendment added "who fails, neglects, or refuses to comply with any order issued pursuant to this part."

Effective Dates. July 1, 1986. Acts 1986, ch. 644, § 20, also provided that the 1986 amend-

ment by that act take effect April 1, 1986, for rulemaking purposes.

Section to Section References. This section is referred to in §§ 68-46-206, 68-46-215, 68-46-216.

68-46-214. Jurisdiction for civil proceedings. — The jurisdiction for all civil proceedings under this part shall be in the chancery court of Davidson County. [Acts 1983, ch. 423, § 14.]

68-46-215. Enforcement. — (a) The commissioner shall exercise general supervision over the administration and enforcement of this part.

(b) The commissioner is authorized in addition to other enumerated powers in chapter 31 of this title and part 1 of this chapter to investigate, identify, and provide for reasonable and safe containment and clean-up, including monitoring and maintenance, of inactive hazardous substance sites.

(c) If any provision of this part is not being carried out, or if effective measures are not being taken to comply with provisions of this part, the commissioner may issue an order for correction to the appropriate person, and this order shall be complied with within the time limit specified in the order. Such order shall be made by personal service or shall be sent-by registered mail.

(d) Any person against whom an order is issued may secure a review in accordance with §§ 68-46-113 and 4-5-301 et seq. Any person failing, neglecting, or refusing to comply with any order of the commissioner or the board shall be subject to the civil and criminal penalties provided in § 68-46-213.

(e) The board is empowered in addition to any other enumerated powers in chapter 31 of this title and part 1 of this chapter to adopt and enforce rules and regulations in accordance with the provisions of the Uniform Administrative Procedures Act, title 4, chapter 5 to implement this part, to hear appeals from orders or assessments issued by the commissioner pursuant to this part, and to issue orders for enforcement of this part. [Acts 1983, ch. 423, § 15.]

the unlawful storage, treatment or disposal of hazardous wastes. [Acts 1983, ch. 423, § 18.]

68-46-219. Landfill permits — Approval by county. — (a) No permit for a commercial landfill facility for the disposal of hazardous wastes shall be issued pursuant to § 68-46-108 unless the county legislative body in the county in which such facility is to be located, and the municipal legislative body if such facility is to be located within the boundaries of an incorporated municipality, approves the issuance of such permit. The board, by regulation, shall develop a procedure for notification of appropriate local government officials of permit applications and the method for notification of the department of approval or disapproval of permits pursuant to this section.

(b) Each county or municipality in which such facility is to be located shall develop and implement a procedure for approval or disapproval of the issuance of such permit, which shall include, at a minimum that:

(1) Within thirty (30) days of receipt by the county or municipality of a copy of the permit application from the department, public notice of a public information meeting shall be given and not less than forty-five (45) days nor more than sixty (60) days from such notice such meeting shall be held;

(2) After the department has completed its evaluation of the permit application and within thirty (30) days of receipt of a copy by the county or municipality of a draft permit or notice of intent to deny the permit by the department, public notice of a public hearing and public comment period shall be given and not less than thirty (30) days nor more than forty-five (45) days from such notice such hearing and comment period shall be held; and

(3) Within thirty (30) days of receipt by the county or municipality of the department's recommendation to the board on the final permit decision, the county or municipal legislative body shall consider the information and testimony presented by the public and shall approve or disapprove the issuance of the permit, and if such legislative body fails to issue such approval or disapproval within such thirty (30) day period, the permit shall be considered to be approved by the local government pursuant to this part. [Acts 1983, ch. 423, § 19.]

68-46-220. Local authority unaffected. — The provisions of this part shall not be construed to supersede or override any local government authority or jurisdiction. [Acts 1983, ch. 423, § 20.]

68-46-221. Fees additional to other fees and taxes. — The fees levied by the provisions of this part shall be in addition to all other taxes or fees, whether levied in the form of excise, license, or privilege taxes, and shall be in addition to all other fees and taxes levied. [Acts 1983, ch. 423, § 21.]

III. TDHE RULE, CHAPTER 1200-1-13
Hazardous Substance Site Remedial Action Program
(Tennessee Superfund List)



TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT
CUSTOMS HOUSE
701 BROADWAY
NASHVILLE, TENNESSEE 37219-5403

TRANSMITTAL NOTICE

DATE: May 20, 1986

TO: Recipient

FROM: James C. Ault, Director
Division of Superfund

SUBJECT: Tennessee Rule Chapter 1200-1-13, Hazardous Substance Site
Remedial Action

Attached is a copy of current regulations implementing The Tennessee State Superfund Program. This Program was established and these regulations were authorized or mandated pursuant to the Hazardous Waste Management Act of 1983 (Tennessee Code Annotated, Title 68, Chapter 46, Part 2). The attached compilation of regulations includes all amendments to Rule Chapter 1200-1-13 which have been adopted by the Tennessee Solid Waste Disposal Control Board to the date of this Notice. In particular, Rule 1200-1-13 included herein has been modified to incorporate the additions, deletions, and other changes to the list of inactive hazardous substance sites which were adopted by the Board on December 3, 1985 and which became effective on February 5, 1986.

It should be noted that the Rule 1200-1-13-.02 included herein is basically last year's rule. Because the unobligated balance in the Hazardous Waste Remedial Action Fund was at or near the maximum allowed by the statute, the Board decided that it was not necessary to promulgate regulations assessing remedial action fees for fiscal year 1986-87.

DH/lag Customs House 2&3

*Repromulgated each year.

RULE 1200-1-3-.01. HAZARDOUS SUBSTANCE SITE REMEDIAL ACTION PROGRAM:
GENERAL

(1) General

(a) Purpose, Scope, and Applicability

1. This Rule provides definitions of terms, general standards, and overview information applicable to these Rules.
2. In this Rule:
 - (i) Subparagraph (1)(b) establishes rules of grammatical construction for these Rules.
 - (ii) Subparagraph (1)(c) describes the system by which these Rules are organized, numbered, and referenced.
 - (iii) Subparagraph (2) defines terms which are used in these Rules.

(b) Use of Number and Gender - As used in these Rules:

1. Words in the masculine gender also include the feminine and neuter genders.
2. Words in the singular include the plural.
3. Words in the plural include the singular.

(c) Rule Structure - These Rules are organized, numbered, and referenced according to the following outline form:

(1) paragraph

(a) subparagraph

1. part

(i) subpart

(I) item

I. subitem

(2) Definitions - Unless otherwise defined in this rule, the definitions found in paragraph (2) of Rule 1200-1-11-.01, "Hazardous Waste Management System: General", shall apply when those terms are used in this Chapter. In addition, when used in this Chapter, the following terms have the meanings given below:

- (a) "Act" means the Tennessee Hazardous Waste Management Act of 1983 (Tennessee Code Annotated Title 68, Chapter 46, Part 2; enacted as Chapter 423 of the Public Acts of 1983).

- (b) "Fund" means the Hazardous Waste Remedial Action Fund created by the Act.
- (c) "Municipal waste" means garbage, combustible and non-combustible rubbish, and ashes from households, motels, hotels, restaurants, institutions, stores, and markets; sweepings, dead animals, and other refuse collected from streets, sidewalks, alleys, and vacant lots; debris from demolition and construction sites; residues from the treatment of municipal sewage; and industrial wastes. As used in this Rule, however, the term shall not include any waste which is a hazardous waste subject to regulation under Department Rules 1200-1-11-.03 through 1200-1-11-.07 (refer to Department Rule 1200-1-11-.02).
- (d) "Fiscal Year" shall mean the twelve (12) month period running from July 1 of any given calendar year through June 30 of the subsequent calendar year.
- (e) "Hazardous substance" shall be defined as such term is defined in Section 101 of Public Law 96-510.
- (f) "Hazardous substance site" means any site or area where hazardous substance disposal has occurred.
- (g) "Inactive hazardous substance site" means any site or area where hazardous substance disposal has occurred but has ceased or is no longer continuing to take place.
- (h) "Liable party" means:
 - (1) The owner or operator of an inactive hazardous substance site;
 - (2) Any person who at the time of disposal was the owner or operator of an inactive hazardous substance site;
 - (3) Any generator of hazardous substance who at the time of disposal caused such substance to be disposed of at an inactive hazardous substance site; or
 - (4) Any transporter of hazardous substance which is disposed of at an inactive hazardous substance site who, at the time of disposal, selected the site of disposal of such substance.

RULE 1200-1-13-.02. REMEDIAL ACTION FEES FOR FISCAL YEAR 1985-86

(1) General

- (a) Purpose - The purpose of this Rule is to establish a system and schedule whereby certain fees are levied and collected annually by the State for deposit in the Hazardous Waste Remedial Action Fund.
- (b) Applicability - The fees imposed by this Rule apply to the following persons:
1. Any person who generates hazardous waste during the fiscal year 1985-86.
 2. Persons possessing during the 1985-86 fiscal year a valid hazardous waste transporter permit issued under the Tennessee Hazardous Waste Management Act, Tennessee Code Annotated Sections 68-46-101 et seq.
- (c) Payment of Fees - Any person assessed a fee under this Rule must submit the fee in the specified amount to the State of Tennessee. The Department may, by notice to such persons prior to such date, further specify the manner of payment. Checks are to be made payable to the State of Tennessee.

(2) Generation Fee -- Amount and Manner of Assessment

- (a) A person subject to this rule and who was a generator of hazardous waste in calendar year 1984 shall pay a fiscal year 1985-86 fee based on the total amount of hazardous waste generated in calendar year 1984, calculated on an as-generated (wet weight) basis in accordance with the below-listed schedule:

<u>Amount of Hazardous Waste Generated in 1984</u>	<u>Fee</u>
1,001 kg (2200 lbs.) to 10,000 kg (22,000 lbs.)	\$ 300
10,001 kg to 50,000 kg (110,000 lbs.)	500
50,001 kg to 100,000 kg (220,000 lbs.)	1,500
100,001 kg to 500,000 kg (1,100,000 lbs.)	4,000
500,001 to 1,000,000 kg (2,200,000 lbs.)	5,500
More than 1,000,000 kg	7,000

- (b) A person subject to this rule who generated no hazardous waste in calendar year 1984 but generated hazardous waste during the period of January 1, 1985 through April 30, 1985 shall pay a 1985-1986 fiscal year fee based upon the amount of hazardous waste he projects to generate during the fiscal year calculated on an as-generated (wet weight) basis in accordance with the below-listed schedule:

<u>Estimated Amount of Hazardous Waste to be Generated in Fiscal Year 1985-1986</u>	<u>Fee</u>
1,001 kg (2200 lbs.) to 10,000 kg (22,000 lbs.)	\$ 300
10,001 kg to 50,000 kg (110,000 lbs.)	500
50,001 kg to 100,000 kg (220,000 lbs.)	1,500
100,001 kg to 500,000 kg (1,100,000 lbs.)	4,000
500,001 to 1,000,000 kg (2,200,000 lbs.)	5,500
More than 1,000,000 kg	7,000

- (c) In calculating a generator's estimated amount of hazardous waste, the following factors shall be considered:

1. The actual amount of hazardous waste generated between January 1, 1985 and April 30, 1985 extrapolated for a full twelve (12) month period.
2. Circumstance which would require the extrapolated figure to be increased or decreased so as to obtain a realistic and fair estimate.

- (d) A person subject to this rule who generated no hazardous waste in the sixteen (16) month period prior to April 30, 1985 but who is subject to notification requirements of 1200-1-11-.03(2) shall pay a minimum fee of Three Hundred Dollars (\$300.00).

(3) Supplemental Fee for Acute Hazardous Waste

In addition to other fees assessed by this rule, any person subject to this rule who generated in calendar year 1984 or in the first four (4) months of 1985 a waste listed in Department Rule 1200-1-11-.02(4)(d)5 as acute hazardous waste which was subsequently landfilled, is hereby assessed an annual fee of

Five Hundred Dollars (\$500.00). For purposes of assessing this fee, any such acute hazardous waste which was generated and shipped off site during the period in question shall be considered to have been subsequently landfilled, unless the generator has documentation demonstrating conclusively that the waste was not ultimately landfilled.

(4) Excluded Waste

(a) For purposes of determining under this rule the amount of hazardous waste generated or estimated to be generated or what constitutes an acute hazardous waste, the wastes listed in subparagraph (b) shall be excluded.

(b) Excluded Wastes are as follows:

1. Waste which is exempted under Rule 1200-1-11-.02(1)(d)3.
2. Waste which was received by (i) any publicly-owned treatment works (POTW), or (ii) any wastewater treatment plant permitted pursuant to Section 402 of the Federal Clean Water Act as amended (Public Law 92-500) or the Tennessee Water Quality Control Act, T.C.A. Sections 69-3-101 et seq., or (iii) any on-site wastewater treatment plant which discharges into the sewer system of a publicly-owned treatment works.
3. Sludge from publicly-owned treatment works located in the state.
4. Bottom boiler ash and flyash from incinerators which process only municipal waste.
5. Hazardous wastes or hazardous waste residues produced as a result of on-site treatment of hazardous waste, unless the waste treated is excluded under this subparagraph.
6. Waste for which, as of April 30, 1985:
 - (i) An exclusion was in effect pursuant to Rule 1200-1-11-.01(3)(c);
 - (ii) An exclusion or partial exclusion was in effect pursuant to Rule 1200-1-11-.01(3)(d);
7. Hazardous Wastes resulting from a spill by a transporter in transit of a hazardous waste or other material which, when spilled, becomes a hazardous waste.
8. Any hazardous waste which is no longer generated in any quantity after April 30, 1985.
9. Hazardous wastes resulting from the containment or clean-up of an inactive hazardous substance site pursuant to this Act.

- (c) The generator of a hazardous waste excluded by subparagraph (b) of this paragraph shall submit to the Department a description of such waste and how it is managed. Such description shall be on form(s) provided by the Department and shall be submitted by the date fee payments are due as established pursuant to subparagraph (1)(c) of this Rule.

(5) Off-Site Shipment Fee

(a) Amount of Fee

Any generator subject to this rule who shipped hazardous waste off-site for treatment or disposal in calendar year 1984 is hereby assessed a fee for fiscal year 1985-1986 of Seven Dollars (\$7.00) per ton so shipped. A generator subject to this rule who shipped no hazardous waste in 1984 but shipped hazardous waste between January 1, 1985 and April 30, 1985 shall pay a fee for fiscal year 1985-1986 of Seven Dollars (\$7.00) per ton so shipped. For purpose of assessing this fee, any hazardous waste which was shipped off-site shall be considered to have been shipped off-site for treatment or disposal.

(b) Excluded Wastes

In determining the amount of hazardous waste shipped off-site for treatment or disposal a generator need not include the following wastes:

1. Wastes which were exempt from regulation pursuant to Rule 1200-1-11-.02(1)(d)3.
2. Waste which was received by any publicly-owned treatment works or any off-site wastewater treatment plant permitted pursuant to Section 402 of the Federal Clean Water Act as amended (Public Law 92-500) or the Tennessee Water Quality Control Act, T.C.A. Sections 69-3-101 et seq.
3. Sludge from publicly-owned treatment works located in the state.
4. Bottom boiler ash and flyash from incinerators which process solely municipal waste.
5. Hazardous wastes which were not generated by the shipper.
6. Wastes for which, as of April 30, 1985:
 - (i) An exclusion was in effect pursuant to Rule 1200-1-11-.01(3)(c);
 - (ii) An exclusion or partial exclusion was in effect pursuant to Rule 1200-1-11-.01(3)(d);

7. Hazardous Wastes resulting from a spill by a transporter in transit of a hazardous waste or other material which, when spilled, becomes a hazardous waste.
 8. Any hazardous waste which is no longer generated in any quantity after April 30, 1985.
 9. Hazardous wastes resulting from the containment or clean-up of an inactive hazardous substance site pursuant to this Act.
- (c) The generator of a hazardous waste excluded by subparagraph (b) of this paragraph shall submit to the Department a description of such waste and how it is managed. Such description shall be on form(s) provided by the Department and shall be submitted by the date fee payments are due as established pursuant to subparagraph (1)(c) of this Rule.

(6) Transporter Fee

Each person possessing during the fiscal year 1985-1986 a valid hazardous waste transporter permit issued under the Tennessee Hazardous Waste Management Act, T.C.A. Sections 68-46-101 et seq. is hereby assessed a fee for the 1985-1986 fiscal year of Two Hundred, Seventy-Five Dollars(\$275.00).

RULE 1200-1-13-.03. LIST OF INACTIVE HAZARDOUS SUBSTANCE SITES

- (1) Purpose/Effect of Listing - The purpose of this Rule is to list those sites within Tennessee that are eligible under the Fund for investigation, identification, containment and clean-up, including monitoring and maintenance. In order to be so eligible, a site must be one which meets the following two criteria: (1) it is an inactive hazardous substance site and (2) it poses or may reasonably be anticipated to pose a danger to public health, safety and environment. Except as provided in subparagraphs (a) and (b) of this paragraph, no site which is not listed in this Rule shall be eligible under the Fund for these activities.
 - (a) It is recognized that the eligibility of a site cannot be determined until some preliminary investigation is undertaken. Hence, those preliminary investigation and assessment activities necessary to determine whether a site should be listed in this Rule shall be considered valid expenditures from the Fund.
 - (b) Pursuant to T.C.A. 68-46-206(c), the Commissioner may undertake such actions as are necessary to abate an imminent and substantial danger to the public health, safety, or environment arising from an inactive hazardous substance site whether or not the site has been listed in this Rule. Such actions shall be considered valid expenditures from the Fund.
- (2) Description of Status Categories - The inactive hazardous substance sites listed in paragraph (4) of this Rule are grouped by status category as follows:
 - (a) Preliminary Assessment Completed - Subparagraph (4)(a) of this Rule lists those inactive hazardous substance sites for which a preliminary assessment has been completed and a determination made that further site inspection/investigation efforts are needed to determine if the site poses a present or potential danger to public health, safety, and environment. A preliminary assessment is a cursory review of readily accessible data to identify emergencies and prioritize sites. This involves research of files, discussion with Department staff, and contact with liable parties. It may or may not include an actual site visit.
 - (b) Site Inspection Completed - Subparagraph (4)(b) of this Rule lists those inactive hazardous substance sites for which a site inspection has been completed and a determination made that further site investigation efforts are needed to determine if the site poses a present or potential danger to public health, safety, and environment. A site inspection is an on-site inspection of a site to secondarily assess the potential hazard to public health, safety, and environment, to identify emergencies which may have been missed by the preliminary assessment step, and to determine if the site merits further investigation. This inspection may include a relatively simple sampling program, field measurements, or other limited types of investigation.
 - (c) Further Investigation Underway - Subparagraph (4)(c) of this Rule lists those inactive hazardous substance sites for which further investigation

activities are underway to determine if the site poses a present or potential danger to public health, safety, and environment and, if so, to define the nature and extent of the danger and to identify appropriate remedial measures or continued monitoring and maintenance needs. Further investigation involves sampling, testing, research and other methods used to definitively assess the degree of hazard posed by a site and to develop design criteria for remedial action. This category may refer to any activities involved in an investigation program, including development meetings with liable parties, review of proposed investigations plans, actual on-site work, and evaluation/interpretation of results.

- (d) Further Investigation Completed - Subparagraph (4)(d) of this Rule lists those inactive hazardous substance sites for which further investigation activities (as described in subparagraph (c) of this paragraph) have been completed and a determination made that remedial actions or on-going monitoring and maintenance efforts are necessary.
- (e) Remedial Action Underway - Subparagraph (4)(e) of this Rule lists those inactive hazardous substance sites for which remedial action efforts are underway. Remedial action refers to the actual corrective measures taken to mitigate the hazard associated with a site. This category refers to sites where remedial action is actually underway including design development, plans review, on-site activities, and final Department evaluation and approval of closure or clean-up.
- (f) Remedial Action Completed/Cost Recovery Pending - Subparagraph (4)(f) of this Rule lists those inactive hazardous substance sites for which remedial action efforts (as described in subparagraph (e) of this paragraph) have been completed and a determination made that continued listing is necessary for recovery of costs pursuant to the Act.
- (g) Monitoring and Maintenance On-Going - Subparagraph (4)(g) of this Rule lists those inactive hazardous substance sites for which monitoring and maintenance activities are continuing. Monitoring and maintenance activities are those on-going activities which are necessary to either determine the necessity of further investigation or to ensure the effectiveness of remedial action conducted to date. Maintenance includes regular upkeep of the site (seeding, mowing, erosion control, etc.) and regular cleaning and repairing of monitoring equipment. Monitoring includes several activities ranging from simple on-site inspections to complex ground-water monitoring.

(3) Changes in Listings

(a) Adding and Deleting Sites

1. Other inactive hazardous substance sites shall be added to the listings of paragraph (4) of this Rule when the Board, acting on the Commissioner's proposal, determines that such sites meet the eligibility criteria established in paragraph (1) of this Rule.

2. A site listed in paragraph (4) of this Rule shall be deleted when the Board, acting on the Commissioner's proposal, determines that the site no longer meets the eligibility criteria established in paragraph (1) of this Rule and that on-going monitoring and maintenance activities are not necessary to ensure protection of public health, safety and environment.
3. The addition or deletion of a site to/from the listing of paragraph (4) shall be done in accordance with the rulemaking procedures established in and pursuant to T.C.A. 4-5-201 et seq., and shall include public notice and public hearing.

(b) Periodic Revision/Repromulgation - The list of inactive hazardous substance sites which constitute paragraph (4) of this Rule shall be revised or repromulgated at least annually by the Board. Such revision or repromulgation shall be done in accordance with the rulemaking procedures established in and pursuant to T.C.A. 4-5-201 et seq., and shall include public notice and public hearing.

(c) Changes in Status Category

1. In order to ensure timely and effective implementation of the program, for working purposes the Commissioner may consider an inactive hazardous substance site to have changed from its status category as listed in paragraph (4) of this Rule (and described in paragraph (3)) to another status category as appropriate upon such completion of efforts or receipt of such information as would warrant such a change. The Commissioner may then take such further actions as appropriate under this new categorization.
2. The Commissioner may effect such changes in status categories as described in part 1 of this subparagraph prior to this Rule being formally so revised pursuant to the rulemaking procedures of T.C.A. 4-5-201 et seq. However, the Commissioner and Board shall ensure that such changes are incorporated into the next rulemaking action pursued under subparagraphs (a) and (b) of this paragraph.
3. Upon changing the status category of an inactive hazardous substance site, the Commissioner shall notify any liable parties and appropriate local officials, citizens, and public interest groups.

(4) List of Sites - The inactive hazardous substance sites listed in this paragraph are grouped by status category and county, and are identified by name and file number. Where more than one individual site is associated with an organization or location, that organization or location is identified by name and overall accounting number and the associated individual sites listed immediately afterward.

(a) Preliminary Assessment Completed

ANDERSON (01)

Accounting

01501 US DOE/Oak Ridge National Laboratory
Bethel Valley Road
Oak Ridge, TN (the following)

Filing

01504 #4 Shale Fracturing Plant -7352
01507 #7 Abandoned Scrap Metal Area
01508 #8 Process Waste Sludge Pond -SWSA-5
01510 #10 White Oak Lake & Dam
01511 #11 Abandoned Trench - 0954 Area (Closed Burn Trench)
01513 #13 Closed Contractor's Landfill
01514 #14 Solid Waste Storage Area (SWSA)1-2624
01515 #15 Solid Waste Storage Area (SWSA)2-4003
01516 #16 Solid Waste Storage Area (SWSA)3-1001
01517 #17 Solid Waste Storage Area (SWSA)4-7300
01518 #18 Solid Waste Storage Area (SWSA)5-7302
01519 #19 Solid Waste Storage Area (SWSA)6-7322
01520 #20 Waste Pit 1 - 7305
01521 #21 Waste Pit 2 - 7306
01522 #22 Waste Pit 3 - 7307
01523 #23 Waste Pit 4 - 7308
01524 #24 Waste Trench 5 - 7309
01525 #25 Chemical Waste Trench 6 - 7310
01526 #26 Waste Trench 7-7318
01533 #33 Process Waste Treatment Plant Settling
Basin - 3513
01549 White Wing Scrap Yard
01550 Homogeneous Reactor Facility Basin
01551 Mercury Contaminated Soil-Building 4501
01552 Mercury Contaminated Soil-Building 3503
01553 Mercury Contaminated Soil-Building 3592
01554 3512 Pond
01555 LITR Ponds-Building 3075

Accounting

01534 US DOE/Y-12 Plant
Bear Creek Road
Oak Ridge, TN (the following)

Filing

01536 Hazardous Chemical Disposal Area
01537 Sanitary Landfill No. 1
01538 Burn Yard
01561 East Fork Poplar Creek Waterway
01562 9204-4 Trenches
01563 Coal Pile Trench

01564 S-2 Pit
 01565 9418-3 Uranium Vault
 01566 Asbestos Disposal Pits
 01567 Bone Yard
 01569 9712 Ravine Disposal Site
 01570 Y-12 Mercury Spills

 01542 US DOE/Comparative Animal Research Lab
 1299 Bethel Valley Road
 Oak Ridge, TN

Accounting

01571 US DOE/Oak Ridge Gaseous Diffusion Plant (ORGDP)
 Oak Ridge, TN (the following)

Filing

01571 K-770, Scrap Metal Yard
 01572 K-1070-A, Contaminated Burial Ground
 01573 K-1070-B, Classified Burial Ground
 01574 K-1070-C & D, Classified Burial Ground
 01575 K-1099-A, Blair Road Quarry
 01576 K-1064-G, Peninsula Storage and Burn Area
 01577 K-1515-F, Sewage Sludge Land Treatment Area
 01578 K-1085, Old Firehouse Burn Area

BRADLEY (06)

06511 Magic Chef Site
 Buchanan Road
 Cleveland, TN

FAYETTE (24)

24505 A. R. Brooks Site
 State Road 143 West
 Fayette County

HAMILTON (33)

33540 Montague Park
 (City of Chattanooga, Inactive)
 East 23rd Street
 Chattanooga, TN

33620 National Micro-Dynamics Site
 Airways Boulevard
 Chattanooga, TN

(b) Site Inspection Completed

Accounting

79528 Velsicol Chemical Co.
1199 Warford St.
Memphis, TN

Filing

79528 North Site
79529 Middle Site
79530 South Site

DICKSON (22)

22503 Ivan Lewis Site (Schrader)
Dickson County

22504 James Jones Site (Schrader)
Adcock Cemetary Road
Dickson County

22505 Glen Erranton Site (Schrader)
Dickson County

22506 Charles Smith Site (Schrader)
Yellow Creek
Dickson County

FRANKLIN (26)

26504 Howard Stewart Property
Cowan, TN

HAMILTON (33)

33542 Hamill Road Dump #2
1111 Hamill Road
Chattanooga, TN

KNOX (47)

47523 Cas Walker Site
Central Avenue
Knoxville, TN

47525 Old Foote Mineral Disposal Pond
Foote Mineral Road
Knoxville, TN

MCMINN (54)

54505 Beaunit Mills Site
Etowah, TN

WASHINGTON (90)

90511 Inventive Technology International
Johnson City, TN

WILLIAMSON (94)

94508 Kennon Site (Genesco)
Williamson County

(c) Further Investigation Underway

ANDERSON (01)

Accounting

01534 US DOE/Y-12 Plant
Bear Creek Road
Oak Ridge, TN (the following)

Filing

01539 Waste Oil Land Farm
01556 Walk-in Pits
01557 Burial Ground A
01558 Burial Ground B
01559 Burial Ground C
01560 Burial Ground D
01568 Bear Creek Waterway

01579 Dupont Smith Junkyard
Oak Ridge, TN

BLOUNT (05)

Accounting

05501 Alcoa/Powders/Pigment Landfills/West Plant
Off US 129
Alcoa, TN (the following)

Filing

05501 Site 1 (Site A)
05502 Site 2 (Site B)

Alcoa/Old Spdl. Landfills/South Plant
Off Springbrook Road
Alcoa, TN (the following)

05503 Site 2
05504 Site 2A

BRADLEY (06)

Accounting

06501 Olin Corporation
Charleston Plant
Lower River Road
Charleston, TN (the following)

Filing
06501 East Disposal Area
06502 South Disposal Area
06503 West Disposal Area
06504 Warehouse "Miscellaneous" Fill Area

06509 Cleveland Plastics
Cleveland, TN

CAMPBELL (07)

07501 Cumberland Plastics
Caryville, TN

COCKE (15)

15505 Newport Dump
Newport, TN

DAVIDSON (19)

19501 Texaco, Inc.
61st and Centennial Blvd.
Nashville, TN

19511 Stauffer Chemical Company
4600 Centennial Boulevard
Nashville, TN

19524 Municipal Landfill - Lebanon Road
Nashville, TN

19533 John P. Saad & Son, Inc.
3655 Trousdale Drive
Nashville, TN

19541 Buzzard Hollow
Old Hickory Boulevard
Nashville, TN

19543 Due West Dump Site
Old Due West
Madison, TN

19549 Pal Hawkins Site
Canton Pass Road
Madison, TN

FAYETTE (24)

24503 Gallaway Pits
(Emergency Action Completed)
Off Highway 70
Gallaway, TN

FRANKLIN (26)

Accounting

- 26501 Arnold Engineering Development Center
HQ AEDC Access Road
Arnold Air Force Station, TN (the following)
- 26502 Old Camp Forrest Water Plant
26505 Leach Pit No. 1
26506 Testing Areas
26507 Retention Reservoir
26508 Chemical Treatment Pond
26509 Landfill No. 4
26510 Surface Drainage - Bradley Cr.
26511 Surface Drainage - Rollins Cr.
26512 Surface Drainage - Brumalow Cr.
26513 Retention Leach/Burn Area
26514 Fire Protection Training
Area No. 2/Burn Area No. 1/ Landfill No. 1

GIBSON (27)

Accounting

- 27505 Milan Army Ammo Plant (MAAP)
Highway 104
Milan, TN (the following)

Filing

- 27505 O-Line Ponds
27507 Closed Landfill
27508 Burning Ground
27509 Ammunition Destruction Area
27510 Closed Burning Ground
27511 Surface Drainage Areas

HAMILTON (33)

- 33508 Southern Wood Piedmont Co.
400 East 33rd St.
Chattanooga, TN
- 33556 3M Chattanooga/GE Ceramics Industrial Plant Site
Cherokee Blvd. & Mfrs. Road
Chattanooga, TN

Accounting

- 33557 US Army Volunteer Army Ammo Plant
Bonny Oaks Drive
Chattanooga, TN

Filing

- 33557 #1 Redwater Holding Lagoon (Fac. 336)
33558 #2 Redwater Holding Lagoon Overflow
33559 #3 Redwater Collection Lagoon (Fac. 337)
33560 #4 Burning Area 3
33561 #5 Sanitary/Industrial Landfill
33562 #6 East Acid Production Area
33563 #7 Trinitrotoluene (TNT), Production Area

33564 #8 Vanadium Pentoxide Catalyst Landfill
 33565 #9 Waste Insulation Landfill
 33566 #10 Industrial Landfill
 33567 #11 Process Waste Holding Lagoon
 33568 #12 Redwater Ash Landfill (Mag. 178)
 33569 #13A Redwater Ash Disposal Site
 33570 #13B Redwater Ash Disposal Site
 33571 #13C Redwater Ash Disposal Site
 33572 #13E Redwater Ash Disposal Site
 33573 #13F Redwater Ash Disposal Site
 33574 #13G Redwater Ash Disposal Site
 33575 #14 Burning Area
 33576 #15 Sanitary Landfill
 33577 #16 Waste Discharge Ponds/Lagoons
 (Ponds 4 & 5)
 33578 #17 Waste Discharge Ponds/Lagoons
 (Ponds 7 & 10)
 33579 #18 Burning Area (Fac. 766)
 33580 #19 Liquid Waste Holding Ponds (South Outfall)
 33581 NN1 Vanadium Pentoxide Storage
 33582 NN2 Redwater Storage Site

 33584 Chattanooga Creek
 Chattanooga, TN

HAWKINS (37)

Accounting

37503 US Army/Holston Ammunition Plant
 West Stone Drive
 Kingsport, TN (the following)

Filing

37503 Area B - WWII Dump Site B
 - Coal Tar Waste Pile
 (adj. to RR track)

 37508 AFG Industries
 Surgoinsville, TN

HENRY (40)

40505 Wright, Carl, Septic Service
 Sunset Drive
 Paris, TN

 40506 Henry County Boneyard
 Paris, TN

HICKMAN (41)

41504 Wrigley Charcoal
 Wrigley, TN

KNOX (47)

Accounting

47506 Ideal Basic Industrial
Cement Park Road
Knoxville, TN (the following)

Filing

47506 Old Kiln Brick Disposal Area - W/Pond - West Site
47526 Old Kiln Brick Disposal Area - Middle Site
47527 Old Kiln Brick Disposal Area - W/Pond B - East Side
47528 Above Ground Disposal Area
47529 Old Waste Disposal Area

47518 Badgett Road Landfill
Badgett & Wright Ferry Roads
Badgett Road
Knoxville, TN

47521 Southern Railway/Coster Shop Dump (4 sites)
3125 N. Central St.
Knoxville, TN

LAUDERDALE (49)

49506 Kenneth Scallions
Ripley, TN

LAWRENCE (50)

50502 Murray-Ohio Landfill
Glenn Springs Rd.
Lawrenceburg, TN

50505 Lawrenceburg Horseshoe Bend Site
Lawrenceburg, TN

MCNAIRY (55)

Accounting

55503 General Electric Company
4th Street
Selmer, TN

Filing

55501 Landfill- North
55504 Nitric Acid Spill #2
55505 Nitric Acid Spill #1
55506 Landfill - South

MADISON (57)

57508 American Creosote Works
(Emergency Action Completed)
Meadow St.
Jackson, TN

MARSHALL (59)

59503 Lewisburg Dump
Crusher Rd.
Lewisburg, TN

MAURY (60)

Accounting

60501 Stauffer Chemical Company
Mt. Joy Road
Mt. Pleasant, TN (the following)

Filing

60501 #1 DMPCT Disposal
60502 #2 Waste Sulfur Disposal
60503 #3 DMPCT Disposal
60504 #4 CMPCT Disposal
60505 #5 DMPCT and DEPCT Disposal
60506 #6 DMPCT and DEPCT Disposal
60507 #7 DMPCT and DEPCT Disposal
60508 #8 BPT-BPD Disposal
60509 #9 BPT-BPD Disposal
60510 #10 BPT-BPD Disposal
60511 #11 BPT-BPD Disposal
60512 #12 BPT-BPD Disposal
60513 #13 BPT-BPD Disposal
60514 #14 BPT-BPD Disposal
60515 #15 P2S5, BPD, DEPCT, etc. Disposal
60516 #16 Wastewater Treatment Sludge Disposal
60517 #17 Brine Salt Disposal
60518 #18 BPT-BPD Disposal
60519 #19 Brine Sludge
60520 #20 Wastewater Treatment Sludge Disposal
60521 #21 Injection Well, Brine and Disposal
60522 #22 Injection Well, Brine and Disposal
60523 #23 Injection Well, HCL and Wastewater Disposal

PUTNAM (71)

71502 Putnam County Landfill
Route 3
Cookeville, TN

RUTHERFORD (75)

75512 Wilkerson Dump
Smyrna, TN

75513 John P. Saad
Silver Springs Road
Smyrna, TN

SHELBY (79)

- 79503 Arlington Blending & Packaging
(Emergency Action Completed)
Arlington, TN
- 79517 Bellevue Ave. Landfill
Bellevue Avenue
Memphis, TN
- 79518 Cypress Creek
Memphis, TN
- 79519 Saunder's Leasing Co. (Behind Memphis Drum)
3229 Tulane Road
Memphis, TN
- 79520 Firestone Tire & Rubber Co.
900 Firestone Avenue
Memphis, TN
- 79549 Chickasaw Ordinance Works
Memphis, TN
- 79561 Nilok Chemical
5030 Millington Rd.
Memphis, TN
- 79604 Memphis Shelby County/Jackson Pits Dump
2900-3100 Blks/Jackson Pits Road
Memphis, TN

Accounting

- 79719 Naval Air Station Memphis
Millington-Arlington Road
Millington, TN (the following)

Filing

- 79719 US NAS/Open Burning/Aircraft School
- 79722 US NAS/Hazardous Waste Burial Ground
- 79723 US NAS/Plating Shop/Drywell/ Building N-126
- 79724 US NAS/Open Burning/Aircraft Drill Site
- 79726 US NAS/Plating Shop Building N-121
- 79728 US NAS/Sanitary Landfill
- 79732 US NAS/Surface Spreading-Unpaved Roads
- 79734 US NAS/Battery Shop/Building N-126
- 79740 US NAS/Plating Shop Storm Sewer & Ditch N-121
- 79736 US Army/Defense Depot Memphis
2163 Airways Boulevard
Memphis, TN
- 79739 East Holmes Road Site
5971 East Holmes Road
Memphis, TN

SULLIVAN (82)

Accounting

82509 Tennessee Eastman Company
Eastman Road
Kingsport, TN (the following)

Filing

82509 #1 Kit Bottom (North and South)
32510 #2 Triangle Facility at South End
82511 #3 Waste Facility Adjacent to
B-245 Warehouse
82512 #4 Former Settling Basin
on Long Island

82515 Bristol Dump
Bristol, TN

82516 Earhart Site
Bristol, TN

82517 AFG Dump Site
S. Wilcox Drive
Kingsport, TN

WASHINGTON (90)

90505 Washington Co. Utility District
(WCUD)
Jonesboro, TN

90510 Cash Hollow Dump
Johnson City, TN

WAYNE (91)

91501 Mallory Capacitor Company
Belew Drive
Waynesboro, TN

(d) Further Investigation Completed

GIBSON (27)

27501 B & H Transformer
Yorkville, TN

MCNAIRY (55)

55503 Michie Dump
Michie, TN

MONROE (62)

62504 Ernest Lee Site
Tellico Plains, TN

(e) Remedial Action Underway

ANDERSON (01)

Accounting

01501 US DOE/Oak Ridge National Laboratory
Bethel Valley Road
Oak Ridge, TN (the following)

Filing

01509 #9 Abandoned Radioactive Sludge Tanks (Gunitite Sludge
Tanks - South)
01548 Gunitite Sludge Tanks - North

Accounting

01534 US DOE/Y-12 Plant
Bear Creek Road
Oak Ridge, TN (the following)

Filing

01534 S-3 Pond

COCKE (15)

15508 Wall Tube & Metal Products
Highway 25 and 70
Newport, TN

FRANKLIN (26)

Accounting

26501 Arnold Engineering Development Center
HQ AEDC Access Road
Arnold Air Force Station, TN

Filing

26501 Landfill No. 2/ Leaching Pit No. 2

HAMILTON (33)

33541 Hamill Road Dump (SRIR)
(Alton Park Land Parcel)
Hamill Road
Chattanooga, TN
33551 Piney Woods Spring Playground (Final Approval Pending)
52nd Street
Chattanooga, TN
33618 Morningside Chemical Co.
Hooker Road
Chattanooga, TN
33619 American Plating
Old Lee Highway
Chattanooga, TN

MONTGOMERY (63)

63506 PCB site
Ft. Campbell Military Resv. (Follow up Tests Pending)
Clarksville, TN

RUTHERFORD (75)

75519 John P. Saad
Smyrna Airport
Smyrna, TN

SHELBY (79)

79575 International Harvester
3003 Harvester Street (Klinke Avenue)
Memphis, TN

79598 North Hollywood Dump
1700-2000 Blks/North Hollywood Street
Memphis, TN

WARREN (89)

89504 Century Electric Facility
(Previously Gould Electric)
McMinnville, TN

(f) Remedial Action Completed/Cost Recovery Pending

COFFEE (16)

16501 Batesville Casket Company Dump
Manchester, TN

DECATUR (20)

20501 Dan Eakers Site
Decatur County

FRANKLIN (26)

26503 Batesville Casket Company Dump
Decherd, TN

HAMILTON (33)

33550 North Hawthorne Avenue Dump
Hawthorne Avenue
Chattanooga, TN

33617 Birchwood Pike Dump Site
Chattanooga, TN

33543 Hamill Road Dump #3
Hamill Road
Chattanooga, TN

HAWKINS (37)

Accounting
37503 US Army/Holston Ammunition Plant
West Stone Drive
Kingsport, TN (the following)

Filing
37504 Area B - Rock Quarry

KNOX (47)

47524 Middlebrook Gasoline Spill
Knoxville, TN

MARION (58)

58504 Scratch Ankle Road Dump Site
Marion County

RUTHERFORD (75)

75517 Glas Tech
Smyrna, TN

75518 Maidencraft
Smyrna, TN

SEQUATCHIE (77)

77501 Eltra Corporation
C & D Battery Division
Dunlap, TN

SMITH (80)

80502 Battery Acid Site
Interstate 40
Smith County

(g) Monitoring and Maintenance On-Going

CARTER (10)

10502 American Bemburg Plant
Elk Avenue - 19 & 23 (Highway 321)
Elizabethton, TN

HAMILTON (33)

33527 Velsicol 'Residue Hill'
4902 Central Avenue
Chattanooga, TN

33532 Amnicola Dump
4902 Central Avenue (Amnicola Hwy.)
Chattanooga, TN

HARDEMAN (35)

35506 Velsicol Chemical Corporation
Toone-Teague Road
Toone, TN

HAWKINS (37)

Accounting
37503 US Army/Holston Ammunition Plant
West Stone Drive
Kingsport, TN (the following)

Filing
37506 Area B - Coal Tar Trench
(adj. to New Sanitary Landfill)

MCNAIRY (55)

55503 General Electric Company
4th Street
Selmer, TN

Filing
55503 Sludge Drying Pond

MAURY (60)

Accounting
60534 Monsanto Co., Inc.
Monsanto Rd.
Columbia, TN (the following)

Filing
60534 Phosphorous Slurry Disposal Area
60535 Old Phosphorous Disposal Area
60536 No. 1 Pond Disposal Facility
60537 Old Tank Farm

SULLIVAN (82)

82506 Automated Industrial Disposal Service (AIDS)
Cedar Valley Road
Bristol, TN

82508 U.S. Army/Holston Ammunition Plant
Area A - Coal Tar Trench
West Stone Drive
Kingsport, TN

UNICOI (86)

- 86501 Bumpass Cove Landfill
Bumpass Cove Road, Route 1
Erwin, TN
- 86502 Bumpass Cove - Fowler Avenue
Bumpass Cove Road, Route 1
Erwin, TN

WAYNE (91)

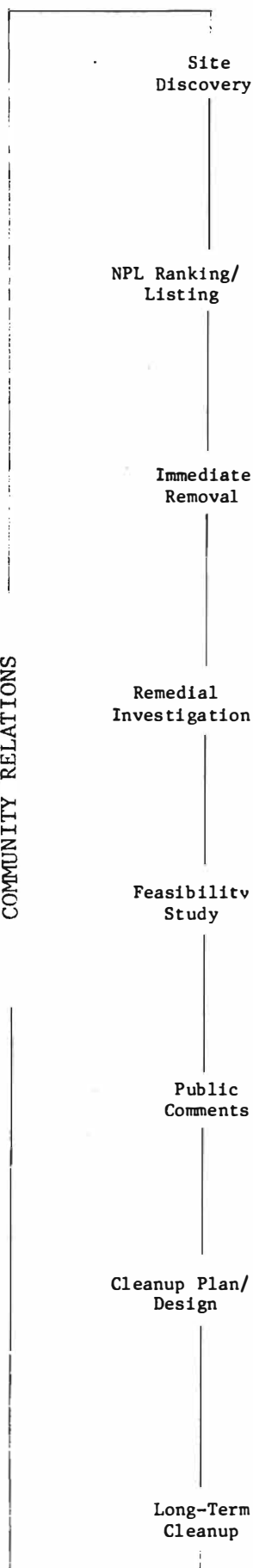
- 91502 Waynesboro City Dump
NE of Waynesboro @ Beech Creek
Waynesboro, TN

DH/bec/SWM-H-13

IV. OTHER INFORMATION

SUPERFUND PROCESS SIMPLIFIED

COMMUNITY RELATIONS



This exhibit provides a simplified explanation of how a long-term Superfund response works.

1. After a site is discovered, it is investigated, usually by the State.

2. The State then ranks the site using a system that takes into account:

- Possible health risks to the human population.
- Potential hazards (e.g., from direct contact, inhalation, fire, or explosion) of substances at the site.
- Potential for the substances at the site to contaminate drinking water supplies.
- Potential for the substances at the site to pollute or otherwise harm the environment.

If the problems at a site are deemed serious by the state and EPA, the site will be listed on the National Priorities List (NPL), a roster of the nation's worst hazardous waste sites. Every site on the NPL is eligible for federal Superfund money. The site may not be considered serious enough to be placed on the NPL but could be suspected to pose enough potential for harm to be placed on the state Superfund list. Therefore, it could qualify for state Superfund dollars.

3. If a site or any portion thereof poses an imminent threat to public health or the environment at any time, EPA or the state may conduct an emergency response referred to as an immediate removal action.

4. Next, EPA or the state usually conducts a Remedial Investigation (RI). The RI assesses how serious the contamination is, what kind of contaminants are present, and characterizes potential risks to the community. As part of the RI, EPA or the state typically conducts an endangerment assessment that describes the problems at the site and the potential health and environmental consequences if no further action is taken at the site.

5. Following completion of the RI, EPA or the state performs a Feasibility Study (FS) which examines various cleanup alternatives and evaluates them on the basis of technical feasibility, public health effects, environmental impacts, institutional concerns (including compliance with state and local laws), impact on the community, and cost. The findings are presented in a draft FS report.

6. Following completion of the draft FS report, EPA or the state holds a public comment period to receive citizen input concerning the recommended alternatives. Citizens may provide comments either orally at public meetings or through written correspondence to EPA or the state.

7. After public comments have been received, EPA or the state then chooses a specific cleanup plan.

8. Once the design is finished the actual remedial activities of the site can begin.

The time necessary to complete each of these steps varies with every site. In general, a Remedial Investigation/Feasibility Study takes from one to two years. Designing the cleanup plan may take six months. And implementing the remedy—the actual containment or removal of the waste—may take from one to three years. If ground water is involved, the final cleanup may take many more years.

Ongoing community relations activities during a cleanup include public meetings and other activities intended to keep citizens and officials informed and to encourage public participation. These activities are scheduled throughout the course of the remedial cleanup process. Specific activities vary from site to site depending on the level and nature of concern. The range of community relations activities that can occur is described in EPA's or the State's Community Relations Plan for the site.

**TENNESSEE
SUPERFUND SITES**

(Not Including Federal Sites)

	<u>Total</u>	<u>Industrial On</u>	<u>Off</u>	<u>Sites In Cities</u>	<u>Sites In Counties</u>	<u>City Owned And/Or Operated</u>	<u>County Owned And/Or Operated</u>	<u>Spill Midnight Unknown</u>
East 22%	21	9	5	8	13	2	5	1
S.East 21%	20	9	2	15	5	3	0	6
Middle 32%	30	9	13	15	15	6	1	1
West 25%	23	8	10	13	10	4	0	1
Totals 100%	94	35	30	51	43	15	6	9
Percentages Of Totals		37%	32%	54%	46%	16%	6%	10%

WASTE FACTS

In 1986, it will cost Philadelphia taxpayers about \$157.00 to dispose a ton of garbage. In New York City, it will cost taxpayers considerably less, about \$93.95 per ton. WW/NOV. 1986

The tipping fee in the Boston area in 1982 ranged from \$15 to \$30 per ton. If you can find a place to tip today, the fee will be well over \$30 per ton, and many communities are paying more than \$60 per ton. AC&C/APR. 1986

The cost of constructing a landfill today is astronomical compared to a decade ago. A new landfill can range from \$65,000 to \$150,000 per acre - not including leachate treatment, roads, scales, buildings, utilities and drainage control structures. This compares with typical costs of \$25,000 to \$50,000 per acre in 1975 for construction of a lined landfill, when not all landfills had a liner and leachate collection system. AC&C/APR. 1986

One county in Florida must spend \$25 million to close and contain a sanitary landfill one square mile in area. AC&C/APR. 1986

To say the hazardous waste problem facing our nation is monumental is to understate the issue. It's one of the biggest threats to public health and environment, certainly through the end of this century, and perhaps well into the next. It's an issue that requires both remedial and preventative action, as decades of abuse have to be uncovered and corrected quickly and, at the same time, intelligent actions must be taken to control the waste problems being created today in our high-tech society. AC&C/FEB. 1984

The role of local government officials and civil servants in dealing with this pressing problem is becoming as complex as the chemical formulations being created and as deep as the wastes stacking up in our dumps. AC&C/FEB. 1984

More than 50,000 new chemicals have been created since the end of World War II. More than 1,000 new chemical substances are being produced each year.

The EPA considers seven out of every ten of those chemicals to be potentially or definitely harmful to human health. AC&C/FEB. 1984

Municipal solid wastes (from residential, commercial, and institutional sources), exceed 150 million tons/year, and industrial wastes total more than 240 million tons/year and are placed in land disposal sites. An estimated 10 trillion gallons of liquid waste are placed in pits, ponds, and lagoons each year. AC&C/FEB. 1984

Between 10 percent and 15 percent of all solid wastes discarded are considered to be hazardous to human health, life, and the environment. AC&C/FEB. 1984

Currently, there are an estimated 200,000 landfills and "unauthorized" dumps, plus more than 176,000 known wastewater impoundments operating in the U.S., many contaminating groundwater supply from which municipal and private wells pull potable water for more than 100 million Americans each day. AC&C/FEB. 1984

EPA estimates that the cost to cleanup all of the sites in the U.S. will be somewhere between \$28 billion to \$55 billion. There are few quick fixes for most existing hazardous waste sites. The chemical and geologic conditions at a site have to be evaluated and a plan engineered to meet each particular situation. AC&C/FEB. 1984

In reality, Superfund pertains to only the more blatant hazardous waste problems, primarily those on the NPL. But community concern goes far beyond this relatively small number of sites, encompassing the collection and disposal of wastes from small quantities generators, household wastes, wastes already located in landfills, underground storage tanks, electrical equipment such as transformers that contain PCB's and asbestos in public buildings. AC&C/OCT. 1986

Studies show that as many as 50% of the 3.5 million underground tanks in the U.S. are leaking or will be leaking in the near future. Typical cleanup costs equal \$25,000, except for the 10% of these sites where leakage has migrated off-site average \$200,000. AC&C/OCT. 1986

In the true realm of marketing, educating the public is as important as marketing the product for purchase. There is no easy road and no quick public relations program that will increase public awareness. Repetition is the key and advertising turns that key in the public's mind. The Superfund process and program needs to be marketed more effectively by state and EPA to local government and the public. Good public relations begins with good communication. Local governments and the businesses and other government agencies that service them need a regular exchange of facts and ideas with the public they serve. But it is crucial that these communication lines be grounded in a positive attitude that both displays regard for the public and then asks respect from the public in return. AC&C/JAN. 1985