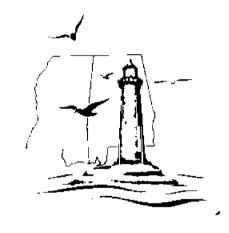
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HANDBOOK FOR WATERBORNE TRANSPORTATION OF HAZARDOUS MATERIALS AND WASTES

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BY

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ABSTRACT

Production, storage, transport, and disposal of hazardous substances are concerns which are rapidly rising to the forefront of national attention. Federal statutes and regulations governing the production and handling of hazardous materials have attained a level of volume and complexity which has few, if any, equal. Manufacturers and transporters have the responsibility to understand and comply with hazardous materials so as to avoid accidents. Increased public interest and pressures to find adequate storage places for hazardous wastes in a "shrinking world" have caused additional demands for state regulation as well. Local governments bear the burden of primary responsibility for immediate reaction to emergency spills of hazardous substances.

This Handbook is concerned with the federal laws as well as the state laws of Mississippi and Alabama concerning hazardous materials and wastes transport, primarily that which travels by water. It is intended to serve as a reference guide to aid local and administrative personnel and elected officials to gain insight into such a complex field of law. Due to the volume of enactments and regulations the Handbook strives only to set forth the black letter law and provide information to enable the user to make contacts necessary to seek out more information regarding interpretation of the law and the specific functions of those who deal with it.

FOREWORD

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The author wishes to thank the people whose assistance made the completion of the <u>Handbook</u> possible. The organizational and editorial suggestions of Casey Jarman, Director of the Sea Grant Legal Program, were critical to the completion of the publication. Linda Spence, secretary for the Sea Grant Legal Program spent many hours typing and contributing to the editing of the <u>Handbook</u>. Student research assistants Veronica Anderson and Greg Winters also contributed to the development of the initial draft. Dan Conner, a Sea Grant Legal Program Staff Attorney, was instrumental in preparation of the <u>Handbook</u> for publication as final grammatical and composition editor.

SECTION I INTRODUCTION AND WORD TO LOCAL OFFICIALS

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The regulation of toxic substances necessitates close cooperation among federal, state, and local officials. While the federal government is largely responsible for keeping abreast of the proliferation of chemicals into the marketplace and assuring adequate testing and screening to determine their hazards, states and local governments also play a vital role in the protection of health and safety. Through federally delegated programs, the states assume important regulatory functions. For example, the Resource Conservation and Recovery Act establishes state authority over solid waste, including hazardous waste, through federally approved state programs. Likewise, local governments must play a key role in controlling the stream of toxic materials, particularly with regard to traffic control and to permanent storage within their jurisdiction. While federal law places certain restrictions on the exercise of local police power over transport of hazardous wastes and materials through communities (such as generally disallowing prohibitions on transport), such authority is still important when exercised in compliance with superior law.

The role of local governments in emergency planning and response is a crucial one. Federal laws and regulations place great reliance upon the capabilities of local governments to respond to emergency situations involving spills of hazardous substances. Such reliance upon existing local infrastructures is due primarily to concerns of geography and cost efficiency. Local governments are often best suited to be first on the scene of a spill incident and to respond to it with emergency response units (police, fire, and emergency disaster services departments) that operate at a constant state of readiness and have experience in emergency situations.

This <u>Handbook</u> presents an overview of the legal and institutional framework governing the waterborne transportation of hazardous materials. A major criticism of toxic substances legislation is that overlapping authority and a variety of topical legislation have produced a needlessly complex regulatory system. This is, in part, a reflection of the rapid development of chemical products in modern markets and a consequent proliferation of waste products. The challenge of keeping pace with such a technological explosion is formidable. Consequently, toxic substance regulations are subject to continual revisions and amendments. With this in mind, it is important to note that this <u>Handbook</u> is designed to present an overview of the topic of the transportation of hazardous materials. WHEN <u>CONSIDERING</u> AN ACTUAL SHIPMENT OF HAZARDOUS MATERIALS IT IS NECESSARY TO REFER DIRECTLY TO ALL APPLICABLE LAWS, REGULATIONS, AND CODES.

SECTION II DEFINITIONS OF HAZARDOUS MATERIALS

A. Generally

Under the federal acheme of regulation, hazardous materials are classified according to the purpose and scope of a particular statute. Accordingly, a hazardous material may be restricted to a specific use, or may be subject to broad controls. Depending on the focus of a legislative directive, standards may be tailored to a specific industrial activity, or may represent a comprehensive limitation on the public's exposure to a hazardous material. Most of the federal toxic and hazardous materials statutes establish lists of regulated materials. Generally, it is up to the shipper to keep abreast of the status of a chemical and make sure that it is handled according to regulations.

There is an important difference between the terms "hazardous materials" and "hazardous wastes." The term "hazardous materials" encompasses a broad range of materials that are considered hazardous to human health or the environment, or pose a hazard of a chemical nature (such as flammability) that creates a risk in handling. "Hazardous wastes" refer to a subset of "hazardous materials". Furthermore, many "hazardous wastes" are termed "solid wastes", although not all solid wastes are hazardous. Although the terms are often interrelated, it is important to keep in mind that many "hazardous wastes" that fall under the purview of "solid waste" legislation are actually liquids. Andersen cites an EPA report to Congress in discussing the confusing term "solid waste" as it applies to "hazardous waste":

"Perhaps the most serious of all solid waste problems is that posed by the presence of hazardous waste in the environment. Reference to hazardous waste as 'solid waste' is a misnomer, since about ninety percent of all hazardous waste is in liquid or semiliquid form." (Andersen, 1978).

The determination whether a substance is a waste material or not is in many cases the function of a generator's stated intent to declare a product to be a waste product. (Hackmann, 1985) Once that determination is made, a material classified as a waste should be treated according to regulations for waste materials. It is apparent that distinguishing between "hazardous materials" and "hazardous wastes" in a statutory scheme presents the possibility of overlapping authority. As a result, the Environmental Protection Agency (EPA) and the Department of Transportation (DOT) work cooperatively in establishing uniform standards for hazardous wastes. [See summary of "Cooperative Efforts Between the Environmental Protection Agency (EPA) and the Department of Transportation (DOT)," page 10.]

The word "toxics" as used in the Toxic Substances Control Act (TSCA) does not necessarily refer to poisons or any other specific class of chemical, but rather refers to a determination based on an evaluation of the circumstances under which a chemical is used, and the relative degree of danger it poses. (Worobec, 1984). Under TSCA the term "toxic substance" is therefore defined in terms of its chemical effects, whether they be

Under TSCA a toxic substance is one that poisonous, disease-inducing, or deleterious to environmental quality. Under TSCA a toxic substance is poses an "unreasonable risk to health or the environment." 15 U.S.C.A. \$\$2601 et seq. (West 1982). lists characteristics of toxic materials that may be subject to testing:

synergistic effects, and any other effect that may present an unreasonable risk to health or the environment. The characteristics of chemical substances for which such standards may be prescribed include persistence, acute toxicity, subscute chronic toxicity, and any other characteristic which "The health and environmental effects for which standards for the development of test data may prescribed include garcinogenesis, mutagenesis, teratogenesis, behavioral disorders, cumulative may present such a risk." 15 U.S.C.A. \$2603(2)(A) (West 1982).

4 B. Hazardous Materials Transportation Act (HMTA), 49 U.S.C.A. \$\$1801 et seq. (West 1976). Regulations at C.F.R. \$\$ 106, 107, 171-179 (1984).

l. Generally

Sixteen thousand hazardous materials are regulated by the Department of Transportation (DOT) under the Hazardous 1) explosives; 2) compressed gases; 3) flammable, pyrophoric, and combustible liquids; 4) flammable solids, oxidizers, and organic peroxides; 5) poisons and etiologic agents; 6) radioactive materials; 7) corrosives; Hazardous materials fall into eight general categories: Materials Transportation Act. (Worobec, 1984). 8) other regulated materials. (DOT, 1985). When transported, hazardous substances and wastes regulated by EPA under the Clean Water Act and the Resource Conservation and Recovery Act are considered subgroups under the Hazardous Materials Transportation Act

Stedman's Medical Dictionary Illustrated, Teratogenesis - origin or mode of production of a malformed fetus. 23rd Edicion.

Synergistic effects (synergy) - coordinated or correlated actions by two or more structures or Stedman's Medical Dictionary Illustrated, 23rd Edition.

 3 Acute toxicity - having an immediate, harmful effect on health and life, DOT, U.S. Coast Guard

⁴Chronic toxicity - the property of a chemical which causes serious ill-health effects long after cumulative low-level exposures. DOT, U.S. Coast Guard. Etiologic agents (etiology) - substances which contribute to the occurrence of disease or abnormal condition Webster's Third New International Dictionary, Unabridged.

(See discussion, page 7). However, the DOT The DOT has included all substances designated as hazardous under the Comprehensive Environmental Response, (Worobec, 1984; Abbot, et al., 1984). Compensation, and Liability Act in its list of hazardous materials. has been slow to extend its regulatory authority to such materials.

2. Hazard Classes

Transportation's Office of Hazardous Materials Transportation (formerly the Materials Transportation Bureau) has established 19 hazard classes, defined in 49 C.F.R. Part 173 (1984). The Department The hazardous materials regulated under the HMTA are divided into hazard classes.

Hazardous Materials Table

Since this table is frequently revised, it is important for shippers to use the most up-to-date version, (BNA, 1984). The table contains information concerning shipping and packaging requirements, proper shipping names, and The Office of Hazardous Materials Transportation regulatory scheme centers around its Hazardous Materials Table. labeling and carriage requirements. (BNA, 1984).

of Transportation's hazard identification and classification system came under scrutiny. The Chairman of the National Transportation Safety Board (NTSB), Jim Burnett, wrote a letter to the DOT outlining concerns. As a result, the DOT has begun an evaluation of current classification standards for their ability to accommodate health-related toxicity information. Burnett's December, 1984 letter stated that, "The DOT system for mechanism for judging hazard and packaging methods. Burnett stated that industry's assessment of hazards considered "only acute threats to life" and limited concerns for the safety of people to the immediate area. considerations, such as vaporization. Burnett emphasized a need for a comprehensive review of DOT's system, observing that "an overall, objective assessment using current technology has not been made to determine its continued adequacy for identifying fully the hazards posed to public safety and health when materials are In 11ght of heightened concern over public safety in the wake of the December, 1984 tragedy in Bhopal, India, where a methyl isocyanate release resulted in the death of more than two thousand people, the Department identifying and classifying the hazard of materials is the outgrowth of a system developed over the years of In developing the system, the letter stated, industry used accident experience as a primary Another criterion that Burnett criticized is the emphasis on flammability to the exclusion of released as a result of transportation accidents." 50 Fed. Reg. 5271 (1985). In response, the DOT initiated rulemaking modifying its hazard classification system. [See 50 Fed. Reg. 5270

Regulations at 40 C.F.R. Toxic Substances Control Act (TSCA), 15 U.S.C.A. \$\$2601 et seq. (West 1982).

other toxic substances regulation because it covers a wide range of chemicals that had been previously unregulated. Other statutes, such as the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) cover specific classes of chemicals. For example, because FIFRA covers pesticide use, chemicals subject to that statute do not fall under the purview of TSCA. TSCA does not regulate chemicals that are already specifically allows for testing of existing substances and retesting for new uses of substances. (Worobec, 1984) By taking a TSCA allows for a broad-scale evaluation of chemicals. According to Worobec (1984), TSCA fills the void left by preemptive approach to test for long-term and short-term effects of chemicals before they enter the marketplace, regulated by other federal toxic control statutes. However, a substance which is a component of a final product that is already regulated may fall within the Act. TSCA regulates the safety of raw materials and does not TSCA's focus is on the regulation of newly produced chemical substances entering the U.S. market. focus on finished products or waste. (Worobec, 1984).

D. Resource Conservation and Recovery Act (RCRA), 42 U.S.C.A. \$\$6901 et seq. (West 1983 & West Supp. 1985). Regulations at 40 C.F.R. \$\$240-271 (1984).

RCRA focuses on waste disposal, including solid and hazardous waste. Section 3001 of the Act provides for the identification and listing of hazardous wastes by the EPA. A waste is classified as hazardous if it exhibits one or more of the following characteristics: ignitability (40 C.F.R. \$261.21), corrosivity \$261.22), reactivity (40 C.F.R. \$261.23), or extraction procedure (BP) toxicity (40 C.F.R. \$261.24). A waste product is subject to RCRA regulations if it is included on any of the three lists of wastes considered by EPA to be hazardous:

- The "F" list of hazardous waste from nonspecific sources (40 C.F.R. \$261.31).
 The "K" list of hazardous wastes from specific sources (40 C.F.R. \$261.32).
 Discarded commercial chemical products (the "U" and "P" lists) including off-specification species (1.e. products that do not meet precise manufacturing specifications), containers, and spill residues. The products on the "U" list are called "toxic" wastes (e.g., vinyl chloride). Those on the "P" list are called "acute hazardous" wastes (e.g., cyanides) and are subject to more rigorous controls than are the other listed hazardous wastes. (ACS, 1984) The "U" and "P" 11sts are found at 40 C.F.R. \$261.33.

Generators of hazardous wastes are responsible for determining whether a waste is hazardous, either because it is listed by EPA or because it exhibits characteristics of a hazardous waste as defined in the RCRA regulations. A waste that is not listed and does not have the characteristics of a hazardous waste under RCRA regulations is not regulated under RCRA. (Worobec, 1984)

August, 1985, wastes from these generators will be required to carry a uniform hazardous waste manifest when 1985 regulations require most businesses that handle even small quantities of hazardous waste to fill out a Uniform Hazardous Waste Manifest (form) to accompany each shipment and to package and label wastes as required small-quantity waste generators will now be regulated where they were previously exempt. (See Chart by Hackmann, In the meantime, as of transporting wastes under the RCRA cradle-to-grave system. (RCRA Hotline, personal communication). The August, RCRA excludes certain wastes, such as household wastes. However, the most recent amendments to RCRA (P.L. significant ø By March 1986 new regulations for small generators will be promulgated. For example, hazardous wastes. by the Department of Transportation. (EPA, 1985). 98-616, November 1984) tighten regulation of

EPA operates a Hotline to provide updated information on RCRA regulations. The RCRA (and Superfund) Hotline number 16 (800) 424-9346.

Federal Shipping Code, Title 46 U.S.C.A. (West 1958 & Supp. 1985 & Supp. Par. Rev. 1985).

46 U.S.C.A. \$2101(14), which lists general definitions for the partially revised Federal Shipping Code, defines a "hazardous material" as a liquid material or substance that is:

-) Flammable or combustible;
- Designated a hazardous substance under Section 311(b) of the Clean Water Act; and/or
- Designated a hazardous material under Section 104 of the Hazardous Materials Transportation Act.

The above definition in the Federal Shipping Code incorporates by reference listed hazardous substances in the Clean Water Act and in the Hazardous Materials Transportation Act. In addition, the Shipping Code emphasizes Again, this definition focuses on physical hazards and does not contain additional reference to health-related criteria. coverage of flammable or combustible materials.

Regulations at 40 C.F.R. \$\$100-140 and (West 1978). 비 F. Clean Water Act (CWA), 33 U.S.C.A. \$\$1251 \$\$400-470 (1984).

cover effluent The Clean Water Act regulates the discharge of both toxic and non-toxic pollutants and includes provisions that Standards for industrial effluents are regulated through the issuance of mandatory regulate industrial activities by controlling discharges of pollutants. Sections 301 and 307 guidelines and limitations. guidelines for industries,

standards for spills under Section 311 of the Act are defined in terms of specific reportable quantities. The In addition, Section 311 of the Clean Water Act directly addresses spills of hazardous substances and petroleum products and contains provisions for reporting and cleanup. Whereas effluent standards for industries under Sections 301 and 307 are defined in terms of tailored guidelines for the discharge of specific pollutants, the most recent adjustments to CERCLA rules (see below) also revise reportable quantities under Section 311 of the Clean Water Act for discharge of hazardous substances into navigable waters, so that reportable quantities will be the same under both laws. {See 50 Fed. Reg. 13,456 (1985) (to be codified at 40 C.F.R. \$117 and \$302).] Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C.A. \$\$9601 et seq. it 1983). Regulations at 40 C.F.R. Part 300 (1984) (and elsewhere, as they intergrade with other G. Comprehensive Environme (West 1983). Regulations environmental statutes).

CERCLA, unlike other federal statutes, does not regulate hazardous substances but rather provides a system for CERCLA's focus is on the identification and cleanup of hazardous materials. Worobec (1984) mentions their identification and cleanup.

incorporates by reference materials as defined in RCRA, the Clean Water Act, the Clean Air Act, and some materials defined in TSCA. In addition, CERCLA contains a "catchall" provision that allows the EPA to designate Worobec (1984) summarizes the list of substances that are considered hazardous under CERCLA. additional substances. The following substances are considered hazardous:

- "Hazardous wastes listed in regulations issued under the Resource Conservation and Recovery Act (40 C.F.R. \$261).
- Hazardous substances listed in regulations issued under Section 311 of the Clean Water Act (40 C.F.R. \$100, \$\$112-114). 6
- Toxic pollutants listed in regulations issued under Section 307 of the Clean Water Act (40 C.F.R. \$116,\$117).
- Hazardous air pollutants listed in regulations issued under Section 112 of the Clean Air Act (40 C.F.R. \$61). 3
- Imminently hazardous substances and mixtures regulated under Section 7 of the Toxic Substances 5
- Any additional substance that EPA designates as hazardous under CERCLA." (Worobec, 1984). 6

The following 18 In April of 1985 the EPA revised its rules concerning reportable quantities under CERCLA \$102. The following i excerpted from the preamble to the final rule at 40 C.F.R. Parts 117 and 302. [See 50 Fed. Reg. 13,456 (1985).] "Sections 103(a) and 103(b) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") require that persons in charge of vessels or facilities from which hazardous substances have been released in quantities that are equal to or greater than the reportable quantities immediately notify the National Response Center of the release. Section 102(b) sets a reportable quantity of one pound for hazardous substances, except those for which reportable quantities have been established pursuant to section 311(b)(4) of the Clean Water Act ("CWA").

present substantial danger to the public health or welfare or [to] the environment. This final rule adjusts many of the reportable quantities established in section 102(b). These reportable quantity adjustments are serious releases, and protect public health and welfare and the environment more effectively. This rule also designates, under section 102(a), all substances listed under the various statutory provisions referenced in intended to reduce (the regulated community's burden of reporting), allow EPA to focus its resources on the most \$311(b)(4) of Section 102(a) authorizes the Environmental Protection Agency ("EPA") to adjust reportable quantities for hazardous substances and to designate as hazardous those substances which when released into the environment may the Clean Water Act for discharges of hazardous substances into navigable waters, so that the CWA \$311 section 101(14) of CERCLA. This rule also revises reportable quantities established pursuant to reportable quantities will be identical with those promulgated under CERCIA,"

United States or a state, as long as such removal is not inconsistent with EPA's National Contingency Plan. In the recent federal court case of Town of Boonton v. Drew Chemical Corp., 23 ERC 1289 (D.N.J. 1985), the suthority to recover cleanup costs was extended to municipalities acting as "the authorized representative of any state". [See 42 U.S.C. \$9607(f)]. The District Court judge found that in light of the fact that New Jersey state. The Court also held that municipalities may clearly recover for CERCLA costs incurred at the direction Section 9607(a)(4)(A) of CERCLA imposes liability for all costs of removal of remedial action incurred by the law gives broad powers to its municipalities, they are commonly acting as authorized representatives of the of the state. Once liability on the part of the defendant chemical corporation was determined the final issue of liability for retroactive application of CERCLA was decided. The Court held that it was the intent of CERCLA that polluters pay the total remedial costs regardless of when the pollution occurred and that such retroactive application of CERCLA did not violate "due process of law".

Sources

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American Chemical Society, 1984, Hazardous Waste Management.

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BNA, 1984, Hazardous Materials Transport Guide, Bureau of National Affairs,

Conservation al., 1979, Determining Unreasonable Risk Under the Toxic Substances Control Act, Davies, et Foundation.

Doyle, 1984, Transporting Hazardous Waste, American Trucking Associations, Inc.

(This EPA publication provides information on general types of businesses from chemical manufacturers to vehicle maintenance and wood preserving operations.) EPA, June 1985, U.S. Gov't. Printing Office # EPA/530-SW-010. of hazardous wastes for seventeen regulations for disposal

Practical Tips for Small Quantity Generators, 4 Environmental Forum No. 2, 38. Hackmann, 1985,

Toxic Substances Controls Primer, Bureau of National Affairs. Worobec, 1984,

SECTION III

COOPERATIVE EFFORTS BETWEEN THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE DEPARTMENT OF TRANSPORTATION (DOT)

Hazardous wastes that are subject to RCRA's manifest requirements and hazardous substances that exceed Clean Water Act reportable quantity standards are regulated by EPA's authority. They are also regulated by DOT shipping regulations under the Hazardous Materfals Transportation Act. The DOT has made its regulations applicable to Clean Water Act standards and to RCRA materials. By the same token, the DOT and EPA have a Memorandum of Understanding that prescribes coordinated investigations of violations and enforcement of applicable regulations. Also, the DOT and EPA have developed a Because consistency in handling "hazardous wastes" and "hazardous substances" is important, the EPA and the DOT uniform hazardous waste manifest form. The shipping manifest form covers both RCRA and HMTA requirements. work together to assure compatible transportation regulations. (Abbot, et al., 1984; Doyle, 1984).

health or the environment, (Abbot, et al., 1984). Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) the EPA has authority to oversee cleanup of releases of toxic materials. CERCLA commerce, or oversee ultimate cleanup and damage determination. Under the Toxic Substances Control Act, EPA may prohibit or iimit the distribution in commerce of a chemical substance that poses an unreasonable risk to public establishes a system of notification of hazardous substance releases from "facilitles" including those used in In some areas, EPA serves as master agency, and can restrict the distribution of a chemical from the flow of transportation. (Abbot, et al., 1984).

In the Code of Federal Regulations, a note under 40 C.F.R. \$263,10 explains the interaction between the EPA and DOT in establishing uniform regulations for the transportation of hazardous wastes:

(DOT) governing the transportation of hazardous materials. These regulations concern, among other expressly adopted these regulations in order to satisfy its statutory obligation to promulgate "Note: The regulations set forth in Parts 262 and 263 establish the responsibilities of generators these regulations, EPA has expressly adopted certain regulations of the Department of Transportation regulations which are necessary to protect human health and the environment in the transportation of EPA's adoption of these DOT regulations ensures consistency with respect to these matters. These EPA regulations which apply to both interstate and intrastate transportation of hazardous waste are enforceable by EPA." and transporters of hazardous waste in the handling, transportation, and management of that waste. things, labeling, marking, placarding, using proper containers, and reporting discharges. hazardous waste.

The Department of Transportation has revised its hazardous materials transportation regulations in order to Transporters of hazardous waste are cautioned that DOT's regulations are as well as interstate, encompass the transportation of hazardous waste and to regulate intrastate, transportation of hazardous waste.

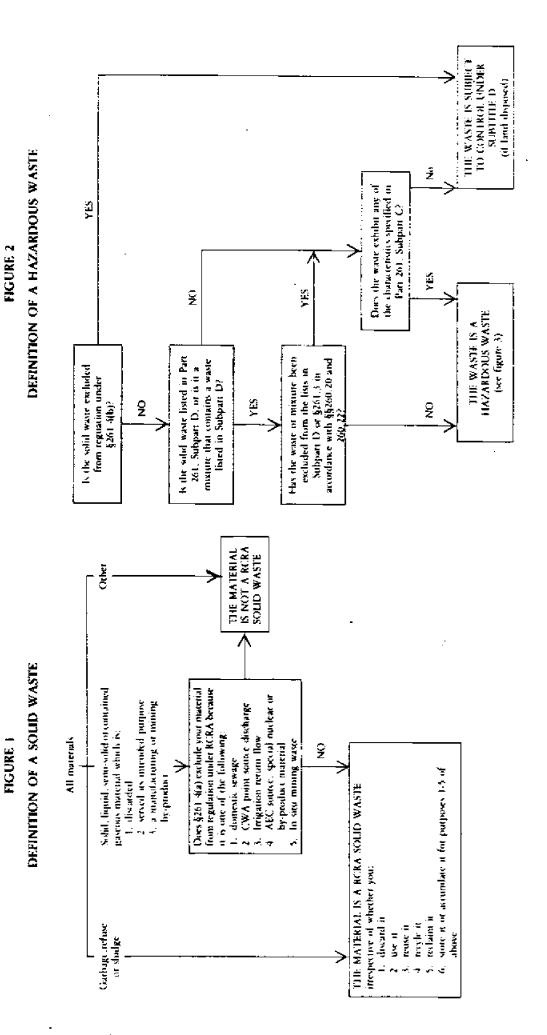
These DOT regulations are codified in Title fully applicable to their activities and enforceable by the DOT. 49, Code of Federal Regulations, Subchapter C. EPA and DOT worked together to develop standards for transporters of hazardous waste in order to avoid conflicting requirements. Except for transporters of bulk shipments of hazardous waste by water, a transporter who meets all applicable requirements of 49 C.F.R. parts 171 through 179 and the requirements of 40 C.F.R. §263.11 and \$263.32 will be deemed in compliance with this part. Regardless of DOT's action, EPA retains its authority to enforce these regulations.

Sources:

Abbott, et al., (Bjorkman ed.), 1984, Hazardous Materials Transportation - A Legislator's Guide, National Conference of State Legislatures.

Doyle, 1984, Transporting Hazardous Waste, American Trucking Associations, Inc.

FIGURES 1 AND 2—DEFINITIONS

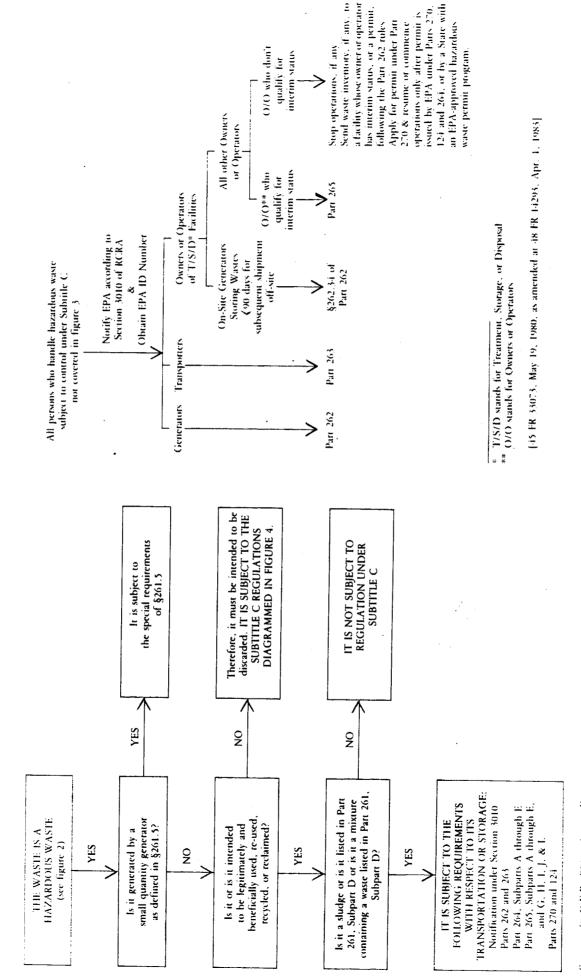


Note: These figures were compiled in 1980 and amended in 1983. They do not reflect recent revisions of RCRA (P.L. 98-616, November 1984). Sounce 40 C.F.R. §260, Appendix 1.

FIGURES 3 AND 4—REGULATIONS

FIGURE 3
SPECIAL PROVISIONS FOR CERTAIN HAZARDOUS WASTE

FIGURE 4
REGULATIONS FOR HAZARDOUS WASTE NOT COVERED IN DIAGRAM 3



Note: These figures were compiled in 1980 and amended in 1983. They do not reflect recent revisions of RCRA (P.L. 98-616, November 1984). Source: 40 C.F.R. §260, Appendix 1

OTHER LAWS COVERNING HAZARDOUS MATERIALS TRANSPORTATION

Responsibility for their administration is divided among several federal agencies. For example, the EPA has the transportation of hazardous materials requires a cooperative effort between agencies. Abbot, et al., (1984) list the following laws as relevant to the transport of hazardous materials, in addition to the Hazardous primary responsibility for the Clean Water Act and the Resource Conservation and Recovery Act. The Coast Guard has primary responsibility for ports and waterways and vessel inspection. The list underscores the fact that provide a list of relevant Acts pertaining to the transportation of hazardous materials. Materials Transportation Act: Abbot, et al.,

Dangerous Cargo Act of 1940, 18 U.S.C.A. \$\$831-835; 46 U.S.C.A. \$\$2106,3301,3310,3702,7502. Sections 601(c) and 902(h)(1) of the Federal Aviation Act of 1958, 49 U.S.C.A. \$1421(c) & \$1472 (h)(1)

Port and Tanker Safety Act of 1978, [formerly: Ports and Waterways Safety Act of 1972], 33 U.S.C.A. Tank Vessel Act of 1936, 46 U.S.C.A. \$\$3301-3318 (West Supp. Par. Rev. 1985).

\$\$1221-1226 (West Supp. 1985).

Natural Cas Pipeline Safety Act of 1968, 49 U.S.C.A. \$\$1671-1686 (West 1976 & West Supp. 1985), Federal Railroad Safety Act of 1970, 45 U.S.C.A. \$\$421-444 (West 1972 & West Supp. 1985)

Resource Conservation and Recovery Act of 1980, 42 U.S.C.A. \$\$6901-6991 (West 1983 & West Supp.1985) Section 311 of the Federal Water Pollution Control Act Amendments of 1972 [amended by: Clean Water Act of 1977, inter alia], 33 U.S.C.A. \$1321 (West Supp. 1985).

Hazardous Liquid Pipeline Safety Act of 1979, 49 U.S.C.A. \$\$2001-2014 (West Supp. 1985).

Source: Abbot, et al., (Bjorkman ed.), 1984, Hazardoue Materials Transportation-A Legislator's Guide, National Conference of State Legislatures.

SUMMARIES OF PERTINENT LEGISLATION

The list of statutes that potentially affect the transportation of hazardous materials is an amalgamation of federal toxic substances legislation and federal legislation designed to control problems of This section contains brief outlines of provisions in federal toxic substances statutes pertinent to the transportation of hazardous materials. They supplement and amplify the discussion of statutes in Section II of general traffic safety. Current criticism centers around their inability to address more specific problems associated with public health hazards. this report.

- A. Toxic Substances Control Act (TSCA), 15 U.S.C.A. \$\$2601 et seq. (West 1982 & West Supp. 1985). Regulations at 40 C.F.R. \$\$702-792 (1984).
- Federal Agency with Jurisdiction: Environmental Protection Agency (EPA).
- Congressional Committees/Subcommittees with Jurisdiction:

Commerce, Transportation, and Tourism Subcommittee of the Energy and Commerce House of Representatives: Committee.

Public Works Toxic Substances and Environmental Oversight Subcommittee of the Environment and Committee. Senate:

- laws. The Act focuses on regulating newly-developed chemicals prior to marketing, but also contains provisions To regulate raw industrial chemicals that fall outside the jurisdiction of other environmental for regulating existing chemicals. Purpose:
- States. It also provides for ranking existing chemicals according to their hazard potential and subjecting them Mechanism: The law provides for listing chemicals that must be evaluated prior to use in the United to toxicity testing when necessary to weigh their beneficial use against their undestrable toxic properties. The law uses a risk-benefit analytical scheme.
- has the authority to inspect manufacturing and storage facilities as well as transporters and impose Enforcement: Chemical manufacture, use, import, or disposal may be banned, controlled, or restricted. In addition, the EPA may seize substances produced in violation of the Act.
- Some Important Features That Could Affect Nazardous Materials Transportation: The "unreasonable risk" standard in TSCA determines the permissibility of allowing the manufacture and distribution of toxic substances. EPA takes test data, exposure estimates, and use patterns into consideration in deciding whether to prohibit,

consumers, or natural resources under planned or current use is weighed along with the potential benefits of the chemical. In some cases, even a small quantity of a highly toxic substance may be banned if it is likely to be control, or restrict use of a substance under the Act. The probability that a chemical will harm workers, used outside a closed system. One area in the regulations produced under TSCA that has direct bearing on the transportation of hazardous materials is the series of provisions regulating imports and exports, 40 C.F.R. \$707 (1984). Imports or exports of chemicals that may pose a hazard during manufacture, use, or disposal either in the United States or in other in issuing customs policy, to refuse importation of chemicals not in compliance with TSCA. Chemicals entering this country must be certified as to their compliance. In most cases certification is based on the actual knowledge of an importer. The importer has a duty to make a good faith effort to see that a material is in compliance. countries can be banned or controlled under TSCA. TSCA requires the Secretary of the Treasury, C.F.R. \$707). Another provision in TSCA allows citizens or public interest groups to sue in federal court if they determine that EPA is in violation of the Act, or if they want to force control of a chemical hazard. Also, under the Act, citizens may petition EPA to issue, amend, or repeal a rule regulating a chemical.

TSCA has an "imminent hazard" provision that gives EPA emergency powers to seize chemical substances or chemicals that pose an immediate health or environmental threat.

Sources:

Worobec, 1984, Toxic Substances Controls Primer, Bureau of National Affairs.

Pye, et al., 1983, Groundwater Contamination in the United States, Univ. of Penn. Press.

- B. Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA), 7 U.S.C.A. \$\$136 et seq. (West 1980 & West Supp. 1985). Regulations at 40 C.F.R. \$\$162-180 (1984).
- Most states provide primary Federal Agency with Jurisdiction: Environmental Protection Agency (EPA). enforcement through EPA authorized programs.
- House of Representatives: Department of Operations, Research, and Foreign Agriculture Subcommittee of Agriculture Committee.

Congressional Committees/Subcommittees with Jurisdiction:

Senate: Agricultural Research and Ceneral Legislation Subcommittee of the Agriculture Committee.

- The law regulates chemicals that function as pesticides, regardless of the original purpose of their manufacture, so long as they are represented in such a way as to result in use as a pesticide. Other chemical products that regulate plant growth and insect life cycles are also regulated. Pesticidal devices such as animal traps are regulated but are not subject to the full registration requirements to which chemicals are To regulate and control the use and safety of the one billion pounds of pesticide produced and used each year in this country. Seventy percent of these products are put to agricultural use. (Worobec, 1984)
- Mechanism: Regulation under the act allows the EPA to establish safety standards for pesticide products and to remove from the market, restrict use of, or refuse registration for products that do not meet these
- 5. Enforcement: This act is employed in conjunction with the Food and Drug Administration's (FDA) authority under the Food, Drug, and Cosmetic Act [21 U.S.C.A. \$301 et seq. (West 1972 & West Supp. 1985)] to set pesticide tolerances in food products. Working cooperatively with the FDA, the EPA collects safety data on pesticides and sets limits for raw meats and agricultural products, while the FDA sets limits for processed foods. The Department of Agriculture sets limits for edible portions of meat. The FDA and the Department of Agriculture carry out inspection programs for foodstuffs.

Pesticides that pose a risk to the environment may be suspended, cancelled, or restricted. The statute also provides for civil and criminal penalties. Nearly all states have assumed primary enforcement responsibilities under FIFRA. (Worobec, 1984).

Some Important Features That Could Affect Hazardous Materials Transportation:

States. As part of the registration procedure EPA must evaluate risks to the environment from use of the product. However, the agency concentrates on the controlled use of a product and its intended application in FIFRA requires that all pesticides be registered with EPA before shipment, delivery, or sale in the United making its assessment. This leaves uncovered other risks associated with improper handling. The economic and recent case that illustrates this problem is the loss of revenue to all U.S. watermelon growers in the summer of health related consequences of improper handling can be serious, and such abuses are difficult to police. 1985 due to the abuse of the pesticide Aldicarb by a few growers in California. FIFRA (according to Worobec, 1984) is unusual among federal environmental laws in requiring EPA to consider not significant risk to human health, it may be restricted to use on the crops it affects the most. A 1978 amendment to FIFRA provides for public access to health and safety studies submitted by registration applicants. formal risk/benefit analysis is employed. If a pesticide has a significant economic impact but poses only the risks posed by a pesticide, but also its economic, social, health, and environmental benefits.

Source: Worobec, 1984 Toxic Substances Controls Primer, BNA.

- C. Resource Conservation and Recovery Act (RCRA), 42 U.S.C.A. \$\$6901 et seq. (West 1983 & West Supp. 1985). Regulations at 40 C.F.R. \$\$240-271 (1984).
- Federal Agency with Jurisdiction: Environmental Protection Agency.
- House of Representatives: Commerce, Transportation, and Tourism Subcommittee of the Energy and Commerce Senate: Environmental Pollution Subcommittee of the Environment and Public Works Committee, Congressional Committees/Subcommittees with Jurisdiction: Committee,
- transporters, and storage treatment of hazardous waste; 4) enforcement of federal standards for facilities classification of hazardous waste; 2) a "cradie-to-grave" manifest system; 3) federal standards for generators, through a permitting program; and 5) authorization of state programs to carry out federal directives. (Quarles, RCRA contains five major elements in its hazardous waste management program: General:

disposal. Thus, the term "cradle-to-grave manifest system" describes a mechanism to ensure accountability. The system operates with a "paper trail" to check the movement of a hazardous material. A generator must supply a transporter with a manifest. The DOT and EPA have developed a Uniform Hazardous Waste Manifest Form, which covers both RCRA and HMTA requirements. (Abbot, et al., 1984; Doyle, 1984) The manffest must have copies for each transporter, with an additional copy for the generator. The generator must keep track of manifests and RCRA contains provisions that track the handling of hazardous materials from their generation to their final the responsibility of investigating a delay in response, and notifying authorities when necessary. (Quarles, receive a return copy from the final designated facility that ultimately receives the waste. The generator

Quarles (1982) summarizes transporters' responsibilities under \$3003 of RCRA. Transporters must keep records hazardous wastes to designated facilities that hold an RCRA permit. Finally, Quarles states that EPA and fulfill their duties in keeping manifest forms. They are responsible for Department of Transportation spill regulations require transporters to take immediate action to protect human health and the environment in reporting requirements incorporated by reference in RCRA regulations. Transporters are required event of a discharge during shipment. (Quarles, 1982).

Manifest - From maritime law; a document required to be carried by shippers which contains an accounting of the Black's Law Dictionary, 4th Ed. Rev. RCRA regulations require all transporters of hazardous materials to obtain an identification number from the EPA. To obtain a number, transporters must contact state officials who handle the EPA program.

Sources:

Abbot, et al., (Bjorkman ed), 1984, Hazardous Materials Transportation-A Legislator's Guide, National Conference of State Legislatures.

Doyle, 1984, Transporting Hazardous Waste, American Trucking Associations, Inc.

Quarles, 1982. Federal Regulation of Hazardous Wastes-A Guide to RCRA, Environmental Law Institute.

Worobec, 1984, Toxic Substances Controls Primer, BNA.

- D. Port and Tanker Safety Act of 1978, 33 U.S.C.A. \$\$1221 et seq. (West Supp. 1985). Regulations at 33 C.F.R. \$160-167, 46 C.F.R. \$\$71, 91 (1984).
- 1. Federal Agency with Jurisdiction: Coast Guard, Department of Transportation.
- 2. Congressional Committees/Subcommittees with Jurisdiction:

House of Representatives: U. S. Coast Guard and Navigation Subcommittee and Merchant Marine Subcommittee of the Merchant Marine and Fisheries Committee.

Senate: Commerce, Science, and Transportation Committee and Environment and Public Works Committee.

- 3. Purpose: The statement of policy in the Act focuses on the need to protect life, property, and the marine environment as the nation faces an increase in waterway traffic. Increased supervision of vessel and port operations is necessary, according to the statement, to reduce losses and to adequately control operations. The Act makes specific reference to the handling of dangerous substances. Finally, it focuses on advance planning to determine proper and adequate protective measures to safeguard ports and waterways.
- 4. Mechanism: The Act gives the Coast Guard authority to establish operating requirements for vessels, traffic safety regulations, and port access routes. It also gives the Coast Guard authority to establish waterfront safety regulations, including regulations for loading, unloading, and storing hazardous materials, and setting structural standards for waterfront facilities.
- 5. Enforcement: The Coast Guard has authority to order a vessel to anchor if there is reason to believe a vessel is in violation of the Act, or if hazardous conditions justify such action. Also, the Coast Guard has authority to investigate accidents. The Act provides for civil and criminal liability, as well as in remliability. In addition, where warranted the Coast Guard may restrict entry or withhold clearance of a vessel.

Sources: Worobec, 1984, Toxic Substances Controls Primer, BNA.

E. Occupational Safety and Health Act (OSHA), 29 U.S.C.A. \$\$651-678 (West 1985), Regulations at 29 C.F.R. 1910.1200 (1985).

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On November 25, 1983 the Occupational Safety and Health Administration (OSHA) adopted a final rule on "Hazard Communication". The new standard requires chemical manufacturers and importers to label containers they ship to manufacturers whose employees must handle the chemicals. The purpose of the rule is to promote effective notice to employees of the hazards of handling such chemicals. Evaluation of hazards associated with various chemicals must be made by the chemical manufacturers and importers, and such information must be transmitted to downstream employers by means of both labeling of containers and forwarding of "material safety data sheets".

OSHA chose to require that the "Hazardous Communication" standard apply only to chemicals used by manufacturing employees because of a greater perceived need for regulation in that sector of industry. This decision of the Secretary was among those challenged by petitioners in the recent federal court case of <u>United Steelworkers of America v. Auchter</u>, 763 F.2d 728 (3d Cir. 1985). In the <u>Auchter case the Third Circuit concluded that the standard could operate in the manufacturing sector</u>, but directed Secretary Auchter to reconsider its application to other sectors. The court invalidated the broad definition of "trade secrets" that constrained disclosure to employees, concluding that the definition of trade secrets "shall not include chemical identity information that is readily discoverable through reverse engineering." 763 F.2d at 741.

OSHA is currently considering expanding the scope of the "Hazard Communication" standard and reassessing the trade secrets exemptions. Nevertheless, the standard, as revised by the Court concerning trade secrets, went into effect on November 25, 1985. Its full impact on transportation of hazardous materials has not yet been anticipated, but some "spillover" effects may be expected.

Source: OSHA, Personal Communication.

 $[\]frac{1}{\ln \text{ rem}}$ - A technical term used to designate proceedings or actions instituted against the thing, in contradistinction to personal (in person) actions. Black's Law Dictionary, 4th Ed. Rev.

SECTION VI BULK SHIPMENT OF HAZARDOUS CARGO

A. Generally

Federal shipping codes are currently undergoing a major reorganization. With regard to transportation of hazardous materials, two statutes were recently modified. 46 U.S.C.A. \$170 governing the carriage of explosives or dangerous goods was repealed, and 46 U.S.C.A. \$391(a) covering bulk transport of inflammable or combustible liquid cargo in bulk was superseded by 46 U.S.C.A. \$3701 et seq. (Chapter 37-Carriage of Liquid Bulk Dangerous Cargoes). The Coast Guard has primary responsibility for bulk transportation of hazardous materials by water. Its authority to monitor shipments and enforce regulations stems from several sources, including authority granted under the Ports and Waterways Safety Act, provisions in the U.S. Shipping Code, and provisions in the Hazardous Materials Transportation Act.

The Coast Guard is involved with certifying bulk materials and can carry out inspections of shipments entering and leaving the country. It oversees loading and unloading operations. Where there is overlapping authority, the Coast Guard oversees the enforcement of EPA and DOT regulations that may apply in addition to shipping regulations.

B. Bulk Transportation of Liquid Dangerous Cargoes, 46 U.S.C.A. \$\$3701 et seq. (West Supp. Par. Rev. 1985).

The Act contains the revised provisions in the U.S. Shipping Code governing the carriage of liquid bulk dangerous cargoes. The statute provides for regulations governing ship design, equipment, crew, stowage, and maneuverability. In addition, it covers the development of regulations for the reduction or elimination of cargo in the event of a marine casualty. The statute requires the Coast Guard to consult with other federal agencies, state and local governments, representatives from port and harbor authorities, environmental groups, and other knowledgeable interested parties, when promulgating regulations.

Vessels of United States registry that fall under the purview of this statute must have a Coast Guard certificate of inspection. Foreign vessels operating in U.S. waters must also be certified. 46 U.S.C.A. §3713 sets up a marine safety information system. This system contains information about each vessel covered by the statute. The Coast Guard can request information concerning the vessel's ownership, registration, and history of marine casualties and repairs, and it has the authority to pursue civil and criminal penalties for violations.

SECTION VII KEY FEDERAL AGENCIES INVOLVED WITH HAZARDOUS MATERIALS TRANSPORTATION

A. Environmental Protection Agency

1. Primary Responsibilities with Regard to Hazardous Materials Transportation

The EPA administers Clean Water Act (CWA) programs, Resource Conservation and Recovery Act (RCRA) programs, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) programs, as well as the programs under the Toxic Substances Control Act (TSCA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),

2. Resource Conservation and Recovery Act (RCRA)

The EPA works in close cooperation with the states to see that RCRA programs allocate primary regulatory authority to federally-approved state-directed programs. Under RCRA the EPA has responsibility to set minimum standards for the states to follow. The EPA assists state programs with grants and technical assistance. If a state chooses not to carry out its own program, the EPA operates an RCRA program for it. Finally, the EPA has the authority to carry out the enforcement provisions of RCRA. (Schrapf, 1982).

With regard to the transportation of hazardous wastes, 40 C.F.R. \$263 governs RCRA requirements. The EPA is responsible for administering RCRA's cradle-to-grave manifest system. The states act cooperatively with the federal government in developing and carrying out duties for authorized programs. All of the states in the Region IV area, with the exception of Alabama, are operating under full EPA authorization. The Alabama program is scheduled for reapproval by EPA in the Fall of 1985. (Region IV spokesperson, personal communication).

A spokesperson from the RCRA program at the EPA Region IV office said that most duties regarding the transportation of hazardous materials are carried out by state officials through federally-approved programs. State officials contact federal EPA officials on behalf of permit applicants to receive necessary transporter identification numbers, as required by RCRA. (For the names and addresses of state officials responsible for RCRA hazardous materials transportation directives see Sections IX and X - State Hazardous Waste/Materials Transport Management - Alabama and Mississippi.)

Within EPA's organizational structure at the federal level, RCRA has an Office of Solid Waste to manage programs under the Act.

3. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Pursuant to the Clean Water Act (CWA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund"), the Environmental Protection Agency directs the National Contingency Plan (NCP). [40 C.F.R. Part 300 (1984)]. The NCP was developed to facilitate hazardous substance spill removal operations. It comes into effect when hazardous substances cannot be safely and effectively removed by the discharger. In instances where "Superfund" money is used to effectuate cleanup, the federal government can recover all or part of the costs as provided for by the CERCLA liability statute, 42 U.S.C.A. \$9607, or alternatively by authority of the CWA liability statute, 33 U.S.C.A. \$1321(f). An advantage to CERCLA is that in addition to recovery for costs of cleanup and environmental degradation, punitive damages equal to three times the cost of actual cleanup can be assessed. [42 U.S.C.A. \$9607(c) (West 1983)]. Subpart F of the National Contingency Plan deals with CERCLA cleanup. [Note: See proposed revisions of the NCP at 50 Fed. Reg. 5862 (1985).]

Under Section 104 of CERCLA (42 U.S.C.A. \$9604), EPA administers the 1.6 billion dollar revolving Superfund Program to finance cleanup. This section authorizes the government to protect public health or welfare from releases or threatened releases of hazardous substances of any quantity, or of pollutants or contaminants in quantities sufficient to present imminent and substantial danger to health or welfare or the environment. (Note: CERCLA does not cover oil spills except those spills of waste oil containing hazardous substances.) (Wilheim, 1981).

EPA has enforcement powers when a threatened release presents imminent and substantial danger to public health or welfare or to the environment. These enforcement powers are similar to those found in the Clean Water Act, the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Air Act.

EPA also has the authority to take prompt remedial action in the event of a release of a hazardous substance. Under 42 U.S.C.A. \$9607, the owner or operator of a vessel or facility is liable for costs of the remedial action, except in a limited set of circumstances where uncontrollable circumstances (war, acts of God, and actions of a third party) precipitate the incident. In the absence of willful negligence, the owner or operator's liability is limited according to a formula based on tonnage and an upper limit for damages. Total liabilities include costs of remedial actions of the United States, costs necessarily incurred by any other person, and damages for injury to or destruction of natural resources. The limits to liability provided by 42 U.S.C.A. \$9607(c) are:

- 1) For vessels carrying hazardous substances as cargo or residue \$300 per gross ton or \$5,000,000, whichever is greater;
- 2) Any other vessel \$300 per gross ton or \$500,000, whichever is greater;
- 3) For motor vehicles, aircraft, pipelines, or rolling stock between \$5,000,000 and \$50,000,000 as determined by regulation (\$8,000,000 for release into navigable waters);
- 4) For any other facility all costs of response plus \$50,000,000 for damages to the environment.

Originally written in conjunction with the Clean Water Act, the NCP also addresses Section 311 of the CWA concerning oil spills and spills of hazardous substances. It has now incorporated the CERCLA law so that cleanup actions may be authorized under either the Superfund law or the CWA. In April of 1985 EPA promulgated a final rule concerning notification requirements and reportable quantity adjustments. [See 50 Fed. Reg. 13,456 (1985), to be codified at 40 C.F.R. \$\$117 and 302.] The rules revised reportable quantities established pursuant to Section 311 of the Clean Water Act, so that the CWA reportable quantities are consistent with those promulgated under CERCLA.

4. Clean Water Act

Section 311 of the Clean Water Act (33 U.S.C.A. §1321) provides authority for remedial response to discharges of oil and hazardous substances into waters of the United States. It greatly overlaps CERCLA provisions also incorporated into the National Contingency Plan, except that it provides different limits to liability and also allows recovery of remedial costs for spills of oil. Section 311(f) of the CWA provides EPA authority to recover actual costs incurred in the removal of oil or hazardous substances discharged by a vessel or facility. It provides defenses to such an action, and provides limits to liability. Defenses to an action by the United States are listed as an act of God, an act of war, negligence on the part of the United States Government, or intervening actions or omissions of a third party. Limits to liability for remedial cleanup of oil or hazardous substance spills are:

1) Vessels

Inland oil barge - \$125 per gross ton or \$125,000, whichever is greater; Any other vessel - \$150 per gross ton or \$250,000 (for vessel carrying oil or hazardous cargo), whichever is greater;

Onshore facilities - \$50,000,000.

Under Section 104 of CERCLA the federal government can recover both remedial and removal costs and environmental "damages" subject to the limits to liability, but under Section 311 of the CWA it cannot recover "damages" per se. Instead, 33 U.S.C.A. \$1321(f)(4) allows recovery for environmental harm only to the extent of repayment of actual costs of federal or state government for restoration and replacement of natural resources damaged by discharge of oil or hazardous substances.

EPA has ultimate authority in overseeing the Plan. The Coast Guard investigates the source of oil and hazardous chemical spills into the environment and waters of the coastal zone, and ensures that spills are properly cleaned up. Inland spills come under the jurisdiction of EPA under 40 C.F.R. Part 300. (For copies of the Memoranda of Understanding between the Coast Guard districts in EPA's Region IV and the EPA, see: EPA, 1984, Regional IV 011 and Hazardous Substances Contingency Plan. Sixth Revision, Emergency and Remedial Response Branch.)

EPA and the Coast Guard share responsibilities for implementation of the National Contingency Plan, and for policing and carrying out provisions of Section 311 of the Clean Water Act. The Coast Guard is authorized to initiate both administrative and civil proceedings against those in violation of the Section 311 mandate. EPA is responsible for coordinating the National Contingency Plan, and for establishing standards and guidelines for Section 311.

The standard of liability for cleanup under Section 311 is somewhat less than that of strict liability. (See 33 U.S.C.A. \$1321). The owner/operator of a vessel is subject to cleanup costs for a spill unless the spill is due solely to an act of God, act of war, negligence on the part of the United States, or a combination of the above factors. However, the Coast Guard may access civil penalties under a theory of absolute liability. In a civil action, a greater penalty than that which the Coast Guard is otherwise authorized to impose may be granted. Those imposing such a penalty take the owner/operator's degree of culpability into account.

Note: For pertinent information concerning the organizational structure supporting Superfund programs, see the Region IV 011 and Hazardous Substances Contingency Plan (EPA, 1984). Also, contact the EPA regional office listed under the "Contacts" listings in the "Sources" section of this paper.

Sources:

Brown, 1984, Superfund and the National Contingency Plan: How Dirty is "Dirty"-How Clean is "Clean"?, 12 Ecology Law Quarterly 89.

Giblin and Kelley, 1984, Judicial Development of Standards of Liability in Government Enforcement Actions Under the Comprehensive Environmental Response, Compensation, and Liability Act, 33 Cleveland St. Law Rev. 1.

Quarles, 1982, Federal Regulation of Hazardous Wastes - A Guide To RCRA, Environmental Law Institute.

Strict liability - Liability without fault. Neither care, good faith, nor ignorance will absolve the defendant. Black's Law Dictionary, 4th Ed. Rev.

Absolute liability - Liability without fault as in strict liability, but also when some causes may be beyond the control of the defendant. Words and Phrases (West 1964 & West Supp. 1985).

³Culpability - Blamable; involving breach of a legal duty or commission of a fault. It implies that the act or conduct is wrong, even though it may involve no malice or guilty purpose. Black's Law Dictionary, 4th Ed. Rev.

Schrapf, 1982, State Hazardous Waste Programs Under the Federal Resource Conservation and Recovery Act, 12 Envtl. Law Rev. 679.

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Wilhelm, 1981, The Regulation of Hazardous Waste Disposal: Cleaning up the Augean Stables with a Flood of Regulation, 33 Rutgers Law Rev. 906.

Contacts:

RCRA-Superfund Hotline (up-to-date information on regulations) (800) 424-9346

Region IV Headquarters United States EPA 345 Courtland Street, NE Atlanta, Georgia 30365 (404) 881-3016

EPA Regional Hazardous Waste Office: Same address

B. U.S. Coast Guard (Department of Transportation)

1. Primary Responsibilities with Regard to Hazardous Materials Transportation

The Coast Guard is responsible for regulation of waterway transport of hazardous materials under the Hazardous Materials Transportation Act, the U.S. Shipping Code, and the Port and Tanker Safety Act. In addition, the Coast Guard has emergency response duties under the Clean Water Act and the Comprehensive Environmental Response, Compensation, and Liability Act.

In conjunction with its emergency response duties, the Coast Guard runs the National Response Center Telephone Hotline: (800) 424-8802 or (202) 426-2675. The purpose of the hotline is to create a reporting center under the National Contingency Plan that prescribes actions to be taken for spills. In the event of a serious emergency or a release or spill of a reportable quantity, the National Response Center Hotline must be notified by telephone, or by other equivalent means (applies to all modes of transportation).

The Coast Guard must be notified of all spills into navigable waterways and adjoining shores covered by Section 311 of the Clean Water Act. The Coast Guard also has some regulatory responsibilities under Section 311; for example, it may supervise cleanup of spills of oil and hazardous substances. It investigates the source of oil and hazardous chemical spills into the environment and waters of the coastal zone and ensures that spills are properly cleaned up. Inland spills fall under the jurisdiction of the Environmental Protection Agency under 40

C.F.R. §300. (Dec. 4, 1984 letter from V. O. Eschenberg, Commander, U.S. Coast Guard, Mobile Office). (For copies of the Memoranda of Understanding between the Coast Guard districts in EPA's Region IV and the EPA, see: EPA, 1984, Region IV Oil and Mazardous Substances Contingency Plan, Sixth Revision, Emergency and Remedial Response Branch.)

Under the Port and Tanker Safety Act, the Hazardous Materials Transportation Act, and the U.S. Shipping Code, the Coast Guard has the authority to oversee the loading and unloading of shipments and conduct inspections.

2. Area of Jurisdiction-Mobile Office

The Mobile (Alabama) Office area comprises 50,000 square miles in the states of Mississippi, Alabama, Georgia, and Florida along 435 miles of the Gulf Coast from the St. Marks River in Florida to the Pearl River in Mississippi. This area includes the Tennessee-Tombigbee Waterway at Bay Springs Lock and Dam in Mississippi to Mobile, Alabama. (The waterway above Bay Springs is under the jurisdiction of the Coast Guard Marine Safety Office in Nashville, Tennessee.)

3. Organizational Structure

Coast Guard Marine Safety interests are divided into three programs. The programs, which are enforced by the Marine Safety Office of the Mobile area of jurisdiction, are:

- Commercial Vessel Safety (CVS);
- 2) Port and Environmental Safety (PES);
- 3) Marine Environmental Response (MER).

The CVS is administered by the Officer in Charge of Marine Inspection (OCMI). The PES and MER programs are administered by the Captain of the Port (COTP). Jurisdiction of each OCMI and COTP is outlined in 33 C.F.R. §3. The Port Operations Department for the Mobile area of jurisdiction [(205) 690-2286] is charged with marine environmental response and the safe control of vessel movements over United States waters. The Port Operations Department investigates oil and hazardous chemical spills and ensures cleanup. For spills occurring within the coastal zone of the Mobile Coast Guard area of jurisdiction, the Commanding Officer, Marine Safety Division, is the predesignated on-scene coordinator for the National Contingency Plan.

The Inspection Department [(205) 690-3303] is responsible for monitoring the construction of new ships, barges, and mobile offshore drilling units built in commercial shippards. It is also responsible for the inspection of vessels throughout their productive life, and it monitors the transportation of bulk and packaged hazardous cargoes on waterfront facilities and vessels.

The Investigations Department ((205) 690-2998] investigates groundings, fires, incidents of water pollution, and casualties aboard commercial vessels. It is responsible for investigating, charging, and prosecuting persons in violation of federal laws under its authority. Hearings are conducted before an Administrative Law Judge. Conviction may result in suspension of required licenses or documentation issued by the Coast Guard. The Investigations Department may in a civil capacity also investigate incidents of pollution or other violations. In such cases evidence or samples may be sent with a Violation Report Form to the District Hearing Office in New Orleans, Louisiana. The District Hearing Office may then levy a fine which upon appeal entitles the party being charged to a civil hearing. (Lt. Morris Stephens, Chief, Investigations Department, U.S. Coast Guard, personal communication).

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4. Overview of Pertinent Coast Guard Regulations

In its investigation of proposed regulation of incineration of hazardous materials at sea. EPA received a list of regulations from the U.S. Coast Guard [50 Fed. Reg. 8249 (1985)]. The Coast Guard believes that the following regulations address the concerns of the public regarding the transport and incineration of hazardous materials at sea:

- 1) Waterfront facilities (in 33 C.F.R. \$\$125,126);
- 2) Pollution prevention (in 33 C.F.R. \$\$153, 155, 156, 157);
- Ports and water safety (in 33 C.F.R. \$\$160, 161, 164, 165);
- 4) National oil and hazardous substances contingency plan (in 40 C.F.R. §300):
- 5) Personnel (in 46 C.F.R. \$\$10, 12);
- 6) Tank vessels (in 46 C.F.R. \$\$30-35 and 40, as applicable);
- 7) Load lines (in 46 C.F.R. Part 42);
- 8) Marine engineering (in 46 C.F.R. \$\$50-54, as applicable, and \$\$56-63, as applicable);
- 9) Barge and miscellaneous vessels (in 46 C.F.R. \$\$90-98, as applicable);
- 10) Electrical engineering (in 46 C.F.R. \$\$110-113, as applicable);
- 11) Bulk dangerous cargo (in 46 C.F.R. \$\$150-153):
- 12) Manning of vessels (in 46 C.F.R. \$157);
- 13) Hazardous material regulations (in 49 C.F.R. §\$171-179).

Sources:

December 4, 1984 letter from V. O. Eschenberg, Commander, U.S. Coast Guard, Mobile Office.

BNA, 1984, Hazardous Materials Transport Guide, Bureau of National Affairs, 50 Fed. Reg. 8249 (1985).

EPA, 1984, Region IV 011 and Hazardous Substances Contingency Plan, Sixth Revision, Emergency and Remedial Response Branch.

C. Department of Transportation (DOT)

1. Organizational Structure

The key administrative office in DOT responsible for transportation of hazardous materials under the Hazardous Materials Transportation Act is the Research and Special Programs Administration (RSPA). It issues regulations and carries out oversight duties. The Office of Hazardous Materials Transportation, which is in the Research and Special Programs Administration of the DOT, is responsible for drafting and issuing (through the administrator) hazardous materials regulations, exemptions, and approvals for all transport modes. It carries out a variety of important tasks in the development of regulations, such as classifying materials as hazardous, setting shipping requirements, and developing regulations for rail, air, vessel, and highway shipments. The RSPA also sets container specifications and lists requirements for tank cars.

The U.S. Coast Guard is under the authority of the Department of Transportation. (See page 26 for information concerning the Coast Guard's responsibilities in control of transport of hazardous substances by water.)

Note: Federal agencies with responsibilities for inspection and regulatory enforcement concerning hazardous material and waste shipments by means other than by water are the Federal Aviation Administration, the Federal Highway Administration's Bureau of Motor Carrier Safety, and the Federal Railroad Administration.

2. Contact Numbers in the Department of Transportation's Office of Hazardous Materials Transportation

Federal, State, and Private Sector Initiatives Division (202) 755-5893 (Useful source of contacts). RSPA Office of Chief Council (202) 755-4972.

Sources:

Abbot, et al., (Bjorkman, ed.), 1984, <u>Hazardous Materials Transportation</u>: A <u>Legislator's Guide</u>, National Conference of State Legislatures.

BNA, 1984, Hazardous Materials Transportation Guide.

Worobec, 1984, Toxic Substances Controls Primer, BNA.

SECTION VIII NATIONAL EMERGENCY RESPONSE

A. EPA Region IV 011 and Hazardous Substances Contingency Plan

In accordance with the Clean Water Act (CWA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Environmental Protection Agency (EPA) directs the National Contingency Plan (NCP) (see 40 C.F.R. §300). [Note: Proposed revisions of the NCP are found at 50 Fed. Reg. 5862 (1985).] The NCP requires the development of Regional Contingency Plans. Alabama and Mississippi are covered by EPA's Region IV Regional Contingency Plan. Copies of this plan as well as those of other EPA regions and U.S. Coast Guard Districts are maintained at the EPA Region IV Regional Response Center in Atlanta (see page 26 for address and phone number). The purpose of the Center is to provide physical facilities for coordination and control of a pollution emergency, should regional-level involvement be required. The Center maintains updated technical materials. In addition, Region IV maintains response vehicles, monitoring devices, and safety equipment. However, it lacks sufficient equipment and personnel to conduct removal operations.

The Region IV Plan involves coordination among federal, state, and local authorities. EPA's Region IV Office investigates and responds to emergencies with predesignated On-Scene Coordinators (OSC's). The OSC's and Remedial Site Project Officers use the Regional Response Team for access to federal resources that the On-Scene Coordinator may find useful for removal and remedial operations. The Coast Guard and EPA have entered into a Memorandum of Understanding that extends availability of remedial activities for sites currently managed by EPA into coastal and port areas.

EPA Region IV frequently requests a state official to serve as EPA's designee to investigate and direct private remedial actions. The EPA Region IV Contingency Plan handbook states, "the releasor and the news media are the traditional non-government parties interested in emergency incidents. Federal law requires that the releasor be given the opportunity to conduct cleanup operations before federal funds are committed. EPA Region IV works closely with the releasors to ensure that cleanup reaches a rapid conclusion."

The Regional Response Team concept is used to monitor and carry out cleanup operations. In Region IV, Compliance Project Officers represent EPA on the Regional Response Teams. The Contingency Plan handbook states that Region IV utilizes special forces and teams to carry out the mandate of the law. The Regional Response Team frequently uses members of EPA's Emergency Response Team, the U.S. Coast Guard Strike Team, Centers for Disease Control, Department of Defense Explosives Ordinance Detachment, and EPA's Technical Assistance Team and Field Investigation Team.

The U.S. Coast Guard National Response Center (NRC) toll free number [(800) 424-8802] is the key number for reporting spills or discharges. If it is impractical to call this number a release may be reported to EPA

Region IV at any time through a number manned by the Emergency and Remedial Response Branch. The number is (404) 881-4602.

B. Phases of Response Under the National Contingency Plan

The EPA Region IV Contingency Plan handbook (1984) divides response activities for cleanup of both oil and hazardous substance spills into five phases. As of July, 1982 federal regulations regarding phases of response were revised to divide emergency response for removal of oil into a four phase strategy and that for hazardous substance removal into seven phases. [300 C.F.R. \$300.51 et seq.]. The 1985 National Contingency Plan which is currently pending final approval of the Administrator of EPA, will incorporate the 40 C.F.R. \$300.51 et seq. changes. The Region IV Contingency Plan will be revised shortly thereafter. (EPA Region IV, personal communication).

Phase I (discovery and notification) of the emergency response procedure is the same for spills of oil and spills of hazardous substances. It requires that reports of discharges be made to the National Response Center or the appropriate EPA or Coast Guard Offices as provided for by the National Contingency Plan. Phase II for hazardous substances requires that a "Preliminary assessment" be undertaken by the On-Scene Coordinator in order to determine the appropriate course of action and to determine whether federal response is warranted. Phase II for removal of oil also includes "initiation of action" by the On-Scene Coordinator. Phase III for oil spills consists of "[c]ontainment, counter-measures, clean-up and disposal" actions necessary to protect public health and the environment. Oil spill response Phase IV, "Documentation and cost recovery" (hazardous substance response Phase VII), is accomplished through reliance upon the On-Scene Coordinator's project log and accounting data necessary to recover federally reimbursable expenditures under CERCLA and the Clean Water Act. Phase III of hazardous substance response, "immediate removal", is to be undertaken where such action will prevent or mitigate significant immediate harm to human health or the environment. Hazardous substances response Phase IV includes "[e]valuation and determination of appropriate response - planned removal and remedial action." Its purpose is to determine appropriate action when further response is deemed necessary by the preliminary assessment or requested by the On-Scene Coordinator. Phase V of the hazardous substance regulations, "planned removal", may be accomplished by cooperative agreement or by contract. In any event, such government involvement can be initiated only by request of the Governor of the affected state. Hazardous substance response Phase VI, "remedial action", provides for responses consistent with a permanent remedy that will prevent or mitigate spread of a spill into the environment.

Sources:

EPA, 1984, Region IV 011 and Hazardous Substances Contingency Plan, Sixth Revision, Emergency and Remedial Response Branch.

EPA Region IV, personal communication.

40 C.F.R. \$300.51 et seq. (1985).

C. Emergency Reporting and Response

The national emergency response network is carried out through cooperative efforts between public emergency response agencies and the chemical industry's private association, the Chemical Manufacturers Association. Initial emergency responses are channeled through CHEMTREC, a hotline for information on first response activities. In addition, the U.S. Coast Guard operates a National Response Center hotline that handles reports of spills and incidents. (Note: For information concerning the state emergency response networks refer to Sections IX-XII.)

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The Department of Transportation's Research and Special Programs Administration publishes an Emergency Response Guidebook (1984), tailored to meet the needs of firefighters, police, and other emergency services personnel. The Guidebook provides instructions for initial response to a hazardous materials incident to help a local official determine the appropriate plan of emergency response. It includes proper methods of approaching an incident and steps to be taken to minimize personal injury and protect the public. The Guidebook also contains information on seeking expert advice through CHEMTREC.

The <u>Guidebook</u> cautions that highly reactive chemicals often require careful handling. The plan of approach to a fire must take into consideration the variety of concerns that local firefighters must consider when responding to a fire. Firefighting judgments are based upon many factors, "such as location, exposure hazards, size and type of fire and the available extinguishing agent and equipment." (DOT, 1984).

The DOT <u>Guidebook</u> recommends that in order to obtain additional assistance beyond the initial actions that the <u>Guidebook</u> prescribes, a call should be made "as soon as possible" to CHEMTREC. [THE CHEMTREC TOLL-FREE HOTLINE NUMBER Is (800) 424-9300.] CHEMTREC is a public service of the Chemical Manufacturers Association and is operated within the Association's National Chemical Response and Information Center (NCRIC) pursuant to its March 1985 reorganization. The 24-hour hotline serves the entire continental United States except for the District of Columbia. For calls originating in the District of Columbia, or outside the continental United States, the following CHEMTREC number applies: (202) 483-7616. CHEMTREC provides on-the-spot advice for those at the scene of an incident, and then contacts the shipper of the hazardous materials for detailed assistance and follow-up. (DOT, 1984). CHEMTREC is equipped to give a caller information on the basis of a shipping identification number, a product name, or a description of the nature of a problem. The DOT <u>Guidebook</u> suggests that the caller provide as much information as possible. To get the most detailed information from CHEMTREC the caller should include his name and callback number, location of the problem, guide number used, the name of the shipper or manufacturer, container type, rail car or truck type, carrier name, consignee, and local conditions.

Finally, the <u>Guidebook</u> states the importance of maintaining an open telephone line to send and receive updated information. (DOT, 1984).

In addition to CHEMTREC, the Chemical Manufacturers Association's National Chemical Response and Information Center maintains three other services: CHEMNET, the Chemical Referral Center, and Emergency Response Training. CHEMNET is a service that makes connections between a pool of for-hire contractors and chemical shippers who cannot promptly respond to an incident that requires immediate action by chemical experts. In some instances another CHEMNET chemical company's expert representative may be dispatched to the scene of an incident in lieu of for-hire assistance.

The Chemical Referral Center is the public information service of NCRIC. It provides health and safety information about chemicals to users, transportation workers, and the general public. NCRIC's Emergency Response Training is accomplished through a series of regular workshops designed to train chemical and carrier response team personnel to most effectively respond to hazardous chemical transportation incidents.

The Coast Guard operates a National Response Center in order to create a reporting system for the National Contingency Plan, which prescribes actions to be taken for spill events. In the event of an emergency or the release or spill of a reportable quantity, the National Response Center hotline must be notified by telephone or by other equivalent means. This applies to all modes of transportation. With regard to waterway transportation, the Coast Guard must be notified for all spills into navigable waterways and adjoining shores covered by section 311 of the Clean Water Act, and for spills of reportable quantities covered by CERCLA. The Coast Guard National Response Center also handles reportable spills for inland spills covered by CERCLA.

THE COAST GUARD NATIONAL RESPONSE CENTER TELEPHONE HOTLINE NUMBER is (800) 424-8802. The number for calls originating in Washington, D.C. and for calls outside the 800 area is (202) 426-2675.

Sources:

U.S. Department of Transportation, Research and Special Programs Administration, 1984 Emergency Response Guidebook.

National Chemical Response and Information Center, <u>Public Information Pamphlet</u>, Chemical Manufacturers Association, 1985.

SECTION IX STATE HAZARDOUS WASTE/MATERIALS TRANSPORT MANAGEMENT: ALABAMA

A. Legislative Authority

Alabama's Hazardous Waste Management Act of 1978 authorized development of the State's program. Ala, Code \$\$22-30-1 et seq. (1984 & Supp. 1985).

B. Hazardous Waste Regulations

The Alabama Department of Environmental Management (ADEM) has published a manual containing the pertinent regulations. Supplements to the manual periodically update the regulations. Transporter requirements are found at Sections 4-265 through 4-270 of the Hazardous Waste Management Regulations.

C. State Permit Program

The State of Alabama carries out the task of ensuring that transporters within the state receive a transporter identification number under RCRA. The state issues permits to transporters of hazardous waste through the Land Division of the Alabama Department of Environmental Management. The state permit is issued in addition to the RCRA-mandated EPA transporter identification number.

D. Permit Applications

In order to apply for an Alabama Hazardous Waste Transportation Permit (under §4-270 of the Alabama Hazardous Waste Management Regulations) a transporter first requests a packet that includes copies of pertinent state regulations, proof of liability insurance forms, and information concerning procedures for reporting spills in Alabama, along with a permit application. In order to obtain a permit, a transporter must submit a spill contingency plan and proof of insurance. (To order permit packets see address on page 35.)

E. Manifests and Recordkeeping

Shipments covered under RCRA standards must be accompanied by the Federal Uniform Hazardous Waste Manifest, Alabama has adopted the federal (EPA) requirements for recordkeeping.

Permit packets may be obtained from:

Alabama Department of Environmental Management (ADEM) Land Division Hazardous Waste Branch 1751 Federal Drive Montgomery, Alabama 36130

The contact person for the hazardous waste transportation permits is:

Joe Brewer (at ADEM) (205) 271-7700.

SECTION X STATE HAZARDOUS WASTE/MATERIALS TRANSPORT MANAGEMENT: MISSISSIPPI

A. Hazardous Waste

- 1. Legislative Authority: Mississippi Solid Waste Disposal Law of 1974. Miss. Code Ann. \$\$17-17-1 et seq. (Supp. 1985).
- 2. Hazardous Waste Management Regulations: Mississippi Hazardous Waste Management Regulations, Chapter 263.
- State Program

Mississippi has received final Phase II authorization from EPA to operate a state program conforming with federal RCRA standards. Transporters apply through the state-operated program to obtain the EPA transporter number required under RCRA.

4. Manifests and Recordkeeping

All shipments of hazardous wastes must be accompanied by the Federal Uniform Hazardous Waste Manifest. Mississippi has adopted the federal requirements for recordkeeping, labeling, and vehicle placarding.

B. Hazardous Materials

According to a spokesperson for the Mississippi Department of Natural Resources, the state does not impose requirements for the shipment of hazardous materials not covered by RCRA, but covered by the Hazardous Materials Transportation Act, beyond those required under the federal law.

Contact for hazardous waste transporters:

Department of Natural Resources
Division of Solid Waste Management
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Contact Person: David Lee (601) 961-5171.

Source: Doyle, 1984 Transporting Hazardous Waste, American Trucking Associations, Inc.

SECTION XI STATE EMERGENCY RESPONSE: ALABAMA

In addition to reporting spills to the Coast Guard National Response Center, a carrier of hazardous wastes within Alabama must report spills to the Water Division of the Department of Environmental Management at (205) 271-7700. (See Appendix 1 for contacts after hours, and for field office hours.)

Sources:

Division of Solid and Hazardous Waste, Alabama Department of Public Health, <u>Hazardous Waste Management</u> Regulations, Promulgated Pursuant to Act 129 of 1978.

Alabama Department of Environmental Management, Land Division, <u>Hazardous Waste Branch</u>, 1985, Hazardous Waste <u>Transportation Permit Packet</u>, application packet.

Doyle, 1984, Transporting Hazardous Waste, Department of Safety and Security, American Trucking Associations, Inc.

SECTION XII STATE EMERGENCY RESPONSE: MISSISSIPPI

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A. Mississippi Natural Disaster Plan

The problems of hazardous spills are covered by the Mississippi Natural Disaster Pian. It is the policy of the state to respond to any request for disaster assistance from local governments throughout the state, and to identify, organize, and mobilize state resources to assist them during and after a natural disaster. The policies and procedures of the plan are intended to be adapted to other emergency conditions, as appropriate and necessary. Emergency operations will be conducted by the lowest level of government affected, and responsibility for operations lies with the head of the affected government. Municipal and county governments are authorized to assign and make available employees, state property and equipment, and also to declare local emergencies, and activate plans. They may accept equipment, supplies, materials, funds or loans from any person, corporation, or the federal government. Local disaster plans should be prepared, tested, and exercised to ensure that the plan is sufficient and workable.

The function of the evacuation and traffic control plan is "to provide a method of evacuating persons from areas of the state which are endangered by the threat of natural disaster or by the spillage of/or threat of spillage of hazardous materials..." Routes for evacuation are to be designated by the State Emergency Highway Traffic Regulations Center (whose functions are controlled by the Mississippi Highway Patrol and the State Highway Department). In the event of an emergency, routes will be controlled by local police and sheriff's departments. Shelters will be opened and staffed according to need.

B. Mississippi Emergency Management Agency

- 1. Responsibilities: The responsibility for emergency management is vested in both the federal and state governments. The federal government conducts research and development and provides coordination between federal and state agencies. The federal government is also responsible for providing guidance to state and local governments in establishing emergency management measures. State and local governments are responsible for preparation of emergency operations, including adequate plans, organization, training, and development of implementation ability. Local governments are responsible for dealing with emergency conditions within their jurisdictions. Each political subdivision is required by state and federal policy to develop plans, capabilities, and procedures to carry out essential services in emergencies.
- 2. Public Information: The Mississippi Emergency Management Agency maintains a full-time Public Information Officer (601-352-9100) for distribution of information on all aspects of emergency management.

3. Plans: The Mississippi Emergency Management Agency has created five plans for emergency situations:

- 1) The Mississippi Administrative Plan;
- 2) The Mississippi War Plan;
- 3) The Mississippi Resources Management Plan;
- 4) The Mississippi Natural Disaster Plan; and
- 5) The Mississippi Radiological Emergency Plan (nuclear disasters).

Sources:

Mississippi Emergency Management Agency, 1977 Mississippi Natural Disaster Plan, Vol. IV.

Maher, J. E., 1984, Mississippi Emergency Management Agency Annual Report 1984.

C. Bureau of Pollution Control (DNR)

The Mississippi Department of Natural Resources' Bureau of Pollution Control maintains an Emergency Response Contingency Plan. The plan incorporates by reference the <u>Hazardous Materials</u> section of the Mississippi Natural Disaster Plan (MNDP). (See Appendix 2). In the event of hazardous materials spills the MNDP assigns responsibilities to the Bureau of Pollution Control. The Bureau also handles oil spills under its Emergency Response Contingency Plan.

The Bureau's response procedures are designed to create a framework to facilitate cooperative efforts among different levels of government (city, county, state, and federal). The Bureau may request that a Federal Regional Response Team be activated in the event an incident exceeds state capabilities.

The Bureau maintains a 24-hour number for state-level notification: (601) 961-5340. The office number for the Bureau of Pollution Control is (601) 961-5106. Other state agencies, such as the State Highway Patrol, notify the Bureau if a spill is reported. Also, federal response organizations will notify the Mississippi Bureau of Pollution Control if a Mississippi spill is reported. (See Appendix 2).

Contact Person:

Bob Rogers, Emergency Services Coordinator (601) 961-5106 Bureau of Pollution Control Mississippi Department of Natural Resources P. O. Box 10385 Jackson, Mississippi 39209

D. Statutory Provisions Relating to Spills

Section 49-17-29(2) of the Mississippi Code states: "It shall be unlawful for any person (i) to cause pollution of any waters of the State or to place or cause to be placed wastes in a location where they are likely to cause pollution of any waters of the State and (ii) to discharge any wastes into any waters of the State which reduce the quality of such waters below the water quality standards established thereof by the Commission. Any such action is hereby declared a public nuisance."

Section 49-17-43(C) of the Mississippi Code states: "Any person who owns or operates facilities which through misadventure, happenstance or otherwise cause pollution necessitating immediate remedial cleanup action will be liable for the cost of same by civil action brought in the circuit court in the county in which venue may lie."

In its 1985 Regular Session, the Mississippi Legislature passed House Bill No. 653, which is designed to ensure that any person who, in good faith and in the exercise of reasonable care renders aid in accidents involving the discharge of hazardous materials, not be subject to civil liability as a result of any act or omission by such person. Thus, the law provides that good faith efforts to render assistance or advice in "mitigating or attempting to mitigate the effects of an actual or threatened discharge of hazardous materials" will not subject to liability the person who freely offers assistance without contemplating compensation. This Act is an extension of the "Good Samaritan" concept of law, which encourages individuals to help out in emergency situations, and limits their liability in the exercise of reasonable assistance.

Abbot, et al., (1984) remark that about half of the states have adopted some form of Good Samaritan legislation with respect to hazardous materials incidents. Some of the statutes provide immunity only to specified personnel. They provide incentives for those with the appropriate technical training to become involved in mitigating the effects of a hazardous materials incident. Most Good Samaritan laws create immunity only for actions or omissions that may be characterized as negligent; in instances of gross negligence (recklessness) the individual may still be held liable. Some states attach conditions, such as that immunity may apply only when help is solicited.

Mississippi's statute, House Bill No. 653, attaches no such condition nor does it restrict coverage only to experts in the field. It refers to "any person" who renders aid. The Mississippi Act incorporates a standard of reasonable care: "any person in good faith and in the exercise of reasonable care renders aid in accidents involving the discharge of hazardous materials shall not be subject to civil liabilities as a result of any act or omission by such person." (Emphasis added). This characteristic is unique to the Good Samaritan laws of Mississippi and creates a confusing situation as to what standard of conduct is to apply to a defendant in a suit which falls within the purview of the Act. Another unusual condition of Mississippi's law is that a person is not covered if he offers assistance contemplating compensation.

While "any person" who renders aid is given statutory immunity, the Mississippi Act does provide that actions covered by the statute are limited to those which are "directly related to the assistance or advice in

mitigating or attempting to mitigate the effects of an actual or threatened discharge of hazardous materials, or in preventing, cleaning up or disposing of or in attempting to prevent, clean up or dispose of any such discharge." House Bill No. 653 (1985).

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Sources:

House Bill No. 653 (1985).

Abbot, et al., (Bjorkman ed.), 1984, Hazardous Materials Transportation-A Legislator's Guide.

National Conference of State Legislatures.

SECTION XIII INTERNATIONAL EXPORTS AND IMPORTS

A. Exports

International shipments of hazardous materials are subject to regulations established by the International Maritime Organization's Dangerous Goods (IMDG) Code. Because the Department of Transportation's regulations for transporting hazardous materials do not always correspond with the IMDG code, in some cases two systems of marking apply to the labeling and shipping of materials. However, DOT policy is to try to work toward greater uniformity in international standards. Central to the DOT's approach to accommodating international standards is the Optional Table at 49 C.F.R. \$172.102. Use of the Optional Table, which prescribes labeling classifications and vessel stowage requirements, minimizes the need for dual markings. The National Committee on International Trade Documentation (NCITD) brochure, "Hazardous Materials/Dangerous Goods Documentation of the United States Export Shipments by Water", written with the cooperation of key federal agencies, cautions that in some cases it is necessary to retain the dual system of marking. In addition, materials cannot be shipped as non-hazardous under the IMDG code from a point in the U.S. if they would otherwise be regulated by DOT. (NCITD, 1983). Even though DOT does not mandate the use of the international code, NCITD advises that the IMDG code be used for exports since many ports throughout the world require it.

1. American Trucking Associations' Assessment of the DOT Optional Tables

The American Trucking Associations' handbook, <u>Handling Hazardous Materials</u>, provides carriers with a list of suggestions for the use of the Optional Table. Although the handbook addresses the needs of truckers, the suggestions are also useful for waterway shippers. The list includes the following advice:

- "Materials are not listed unless they are subject to the [IMDG] code. Therefore, a material that is defined as a hazardous material by DOT, but which is not subject to [International Maritime Organization (IMO) regulations] will not be shown."
- "Materials that are subject to the [IMDG] code are listed in the Optional Table even if they are not subject to DOT regulations."
- 3) "[IMO] class descriptions are by number and may, or may not, bear the optional notation [IMO] Class' preceding or following the class number."
- 4) "When a material is transported by a motor vehicle and the [IMO] class or division is used in the description, the shipping paper must also include the hazard class name from Part 173 that most closely corresponds to the [IMO] class assigned to that material..."

5) "When the [IMO] description is used and the material is in a different hazard class under [IMO] regulations, the appropriate [IMO] class designations must be used..." (Bell, 1980).

2. International Standard-Setting Bodies

Abbot, et al., (1984) state that U.S. policy is to promote a consistent system of international regulations for shipment of hazardous materials. They list key international standard-setting bodies that establish regulations and guidelines that are important to international shippers. These include:

- 1) The United Nations Committee of Experts on the Transport of Dangerous Goods;
- The International Maritime Consultative Organization (now known as the International Maritime Organization);
- The International Civil Aviation Organization;
- 4) The European Economic Community Group of Experts on the Transport of Dangerous Goods:
- 5) The International Atomic Energy Agency.

The U.S. Department of Transportation sends representatives to international agencies when the U.S. is requested to participate in standard-setting. Recommendations of these international standard-setting, bodies are reflected in rules adopted by individual countries. An example of this is DOT's adoption of the Optional Table to accommodate the IMDG Code. Other countries have also taken the effort to accommodate international standards.

Sources:

Abbot, et al., (Bjorkman, ed.), 1984, <u>Hazardous Materials Transportation-A Legislator's Guide</u>, National Conference of State Legislatures.

Bell, 1980, Handling Hazardous Materials, American Trucking Associations, Inc.

National Committee on International Trade Documentation, 1983, <u>Hazardous Materials/Dangerous Goods Documentation</u> of United States Export Shipments by Water.

See also: Gusman, et al., 1980, Public Policy for Chemicals-National and International Issues, The Conservation Foundation.

B. Imports

U.S. importers of bazardous materials bear the responsibility of seeing that a foreign shipper conforms with appropriate U.S. regulations. Under Toxic Substances Control Act regulations, for example, an importer has a duty to make a good faith effort to see that the transported material qualifies for certification of compliance. Under Hazardous Materials Transportation Act regulations, an importer has the duty to provide foreign shippers and initial U.S. shipping agents with detailed information concerning DOT shipping requirements and DOT Hazardous Materials Certification. The shipper or his agent must obtain the necessary certification from the DOT. (NCITD, 1983).

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As with the export of hazardous materials, in some instances materials shipped inland from a port may be labeled according to the IMDG Code instead of the standard DOT code, in accordance with the DOT Optional Table. This precludes the necessity for dual markings. The shipper must be aware, however, that packaging requirements may necessitate DOT standards, even if DOT markings are not required, according to the mode and circumstances of transport.

Source: NCITD, 1983, Documentation of Hazardous Materials/Dangerous Goods on the United States Exports Shipments by Water, National Committee on International Trade Documentation.

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Brown, 1984, Superfund and the National Contingency Plan: How Dirty is "Dirty"-How Clean is "Clean"?, 12 Ecol. L.Q. 89.

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Davies, et al., 1979, Determining Unreasonable Risk Under the Toxic Substances Control Act, Conservation Foundation.

Doyle, 1984, Transporting Hazardous Waste, American Trucking Associations, Inc.

EPA, June 1985, U.S. Gov't. Printing Office # EPA/530-SW-010.

EPA, 1984, Region IV 011 and Hazardous Substances Contingency Plan, Sixth Revision, Emergency and Remedial Response Branch.

Giblin and Kelley, 1984, Judicial Development of Standards of Liability in Government Enforcement Actions Under the Comprehensive Environmental Response, Compensation, and Liability Act, 33 Cleveland St. L. Rev. 1.

Gusman, et al., 1980, Public Policy for Chemicals-National and International Issues, The Conservation Foundation,

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Pye, et al., 1983, Groundwater Contamination in the United States, Univ. of Penn. Press.

Quarles, 1982, Federal Regulation of Hazardous Wastes-A Guide To RCRA, Environmental Law Institute.

Schrapf, 1982, State Hazardous Waste Programs Under the Federal Resource Conservation and Recovery Act, 12 Envtl, L. Rev. 679 (1982).

Wilheim, 1981, The Regulation of Hazardous Waste Disposal: Cleaning up the Augean Stables with a Flood of Regulation, 33 Rut. L. Rev. 906.

Worobec, 1984, Toxic Substances Controls Primer, Bureau of National Affairs.

APPENDIX 1

ALABAMA PROCEDURES FOR REPORTING SPILLS

According to 30 C.F.R., Part 153 203 (b), the U.S. Coast Guard National Response Center maintains a 24-hour toll free number to facilitate the reporting of oil and hazardous material spills and to satisfy Federal requirements for reporting. The toll free number is 800-424-8802.

In addition, if anyone observes or has caused a spill of oil, chemical, and/or hazardous substance, the State should be notified as follows:

Alabama Department of Environmental Management - Water Quality Program

*Spill Coordinator - E. John Williford

Normal Office Hours, Weekdays - 8:00 a.m. - 5:00 p.m.

(205) 271-7700

After Business Hours, Weekends, Holidays

*E. John Williford

(205) 272-6188

Charles Horn

(205) 277-1364

James Warr

(205) 272-5849

As a matter of convenience or practicality, the Commission's Field Offices at Mobile and Birmingham can also be notified as follows:

Mobile Field Office

Normal Office Hours, Weekdays - 8:00 a.m. - 5:00 p.m.

(205) 479-2336

After Business Hours, Weekends, Holidays

John Carlton

(205) 649-7108

Birmingham Field Office

Normal Office Hours, Weekdays - 8:00 a.m. - 5:00 p.m.

(205) 942-6168

After Business Hours, Weekends, Holidays

Steve Spencer

(205) 833-4773

Although notification to the Coast Guard National Response Center fulfills the Federal requirements, the following telephone numbers are listed as a matter of convenience:

U.S. Environmental Protection Agency

(404) 881-4062

U.S. Coast Guard, Mobile

(205) 690-2211

In the event of inability to contact the offices and individuals listed above the reporter should call:

(205) 261-4378

APPENDIX 2

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ANNEX II-P, MISSISSIPPI NATURAL DISASTER PLAN

SUBJECT: HAZARDOUS MATERIALS

I. REFERENCES

Executive Order 185

II. DEFINITIONS

Hazardous Material: Any substance harmful or injurious to humans, animals, economic crops, and private or public property. "Hazardous material," as used in this plan, is classified as chemical, biological, radiological, or explosive.

A. Chemical

Toxic, corrosive, or injurious substance because of inherent chemical properties and includes, but not limited to such items as petroleum products, paints, plastics, acids, caustics, industrial chemicals, poisons, drugs, mineral fibers (asbestos).

B. Biological

Microorganisms or associated products which may cause disease in humans, animals, or economic crops and include pathogenic wastes from medical institutions, slaughterhouses, poultry processing plants, and the like; imported unprocessed wool fibers.

C. Radiological

Any radioactive substance emitting ionizing radiation at a level sufficient to produce a health hazard.

D. Explosive

Material capable of releasing energy with blast effect in a split second upon activation; the released energy usually damages or destroys objects in close proximity to the blast.

III. SITUATION

- A. Hazardous materials are commonly used, transported and produced in this State; hence it is reasonable to assume that hazardous materials accidents may occur as the result of natural disasters, human error or accident.
- B. This plan contemplates the actions to be taken when a hazardous material has been or may be released to the environment.
- C. Disasters involving hazardous materials are usually confined to a localized area and action should be taken to contain resultant spills as promptly as possible. Rapid communication channels must be utilized to inform responsible officials for emergency response.

IV. MISSION

To remove the threat to public health and safety which may result from an accident involving hazardous materials. The resources of industry, local, State or Federal government, separately or in combination, may be required to cope with the situation, dependent on the magnitude, nature, and area threatened by hazardous materials.

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V. TASKS

A. Local Government

- 1. Evaluate the situation, isolate the area, contain spill, neutralize spill or hazard and restore areas to normal.
- 2. After the situation is evaluated and it is determined to be beyond local recovery capabilities, the appropriate State Agency having assistance capabilities should be notified in the most expeditious manner. [See page 52, HAZARDOUS MATERIALS CONTACTS, for telephone numbers] In the event appropriate agencies cannot be located the Mississipi Highway Patrol District or the State Civil Defense Director should be notified.

B. State Governments (Primary Responsibilities)

1. Air and Water Pollution Control Commission

- a. Identify, contain, neutralize hazardous materials and chemicals (assisted by appropriate state and private agencies) which endanger lives and/or are potential air and water pollution hazards.
- b. Locate suitable sites and establish acceptable procedures for disposal of hazardous materials.
- c. Provide curent emergency telephone numbers to Mississippi Highway patrol and State Civil Defense Office.

2. State Department of Health

- a. Identify, isolate, coordinate control of source of radiation and coordinate necessary actions to protect public health and safety.
- b. Identify, isolate, and recover hazardous biological materials.
- c. Locate suitable sites and establish acceptable procedures for disposal of hazardous materials.

3. Mississippi Highway Patrol

- a. Provide assistance to local officials upon request when there is a hazardous materials accident.
- b. Provide emergency communications when other communications are not available.
- c. Notify appropriate responsible State and/or Federal Agency upon receipt of information regarding bazardous materials accidents. (Note Appendix 1.)

4. State Civil Defense Council

Coordinate State resources as required, depending on the nature and magnitude of the disaster.

C. State Government (Secondary Responsibilities

- 1. Agriculture and Commerce Department
 Assist in identification of dangerous chemicals and pesticides.
- 2. <u>Public Service Commission</u>
 Provide technical advice in hazardous materials accidents involving railroads, motor carriers or gas pipelines.
- 3. Motor Vehicle Comptroller Provide technical advice in hazardous materials accidents involving motor vehicles.
- 4. State Oil and Gas Board
 Provide information relative to location of gas and oil pipelines and emergency telephone numbers of owners and/or disaster response personnel.

VI. CONCEPT OF OPERATIONS

- A. Persons at the scene, common carriers, owners, operators, law enforcement personnel, or other persons are expected to isolate the area and communicate to the nearest local government official responsible for containment or removal of the threat, any observed or known facts relating to a potential or actual materials accident.
- B. The local government official contacts the nearest available, as appropriate:
 - 1. Owner, supplier, vendor, shipping agent, carrier or other shipment-related individual.
 - 2. Local Public Health Official
 - 3. Local Agriculture Extension Agent
 These individuals utilize available resources to evaluate and restore the situation to normal conditions if within their capacity.
- C. When the hazardous situation is beyond a capability to correct, the local government official contacts the appropriate State Agency. Should the local government official be unable to contact the State Agency for any reason, then he requests the nearest Mississippi Highway Safety Patrol. District to transmit without delay all pertinent information relating to the situation to Mississippi Highway Safety Patrol Headquarters. MHP Headquarters, in turn, immmediately contacts the appropriate State or other agency. The responsible agency mobilizes and coordinates those resources required for recovery operations.
- D. A situation may develop from the accidental widespread scattering or release of hazardous material, or the loss of control over hazardous material in conjunction with a natural disaster of nature which cuts across the lines of responsibility of two or more State Agencies. In this situation, the MEP Headquarters contacts all agencies responsible for the recovery effort.

VII. READINESS

State Agencies assigned responsibilities in this annex are responsible for developing and/or keeping current internal plans that will assure a continuing acceptable degree of operational readiness to carry out their responsibilities. Essential to any internal plan is a current listing of responsible

individuals, and alternates, who may be contacted at any time in any emergency. See below for a listing of current emergency numbers.

ANNEX II-P, MISSISSIPPI NATURAL DISASTER PLAN (Continued)

SUBJECT: HAZARDOUS MATERIALS CONTACTS

- I. For all accidents involving explosives devices and for assistance in traffic control or evacuation, call the nearest Mississippi Highway Patrol District.
 - A. District 1 Jackson 982-1212 B. District 2 Greenwood 453-4515
 - C. District 3 Batesville 563-4651
 - D. District 4 New Albany 434-4755
 - E. District 5 Starkville 323-5314 F. Diatrict 6 Meridian 693-1926
 - F. District 6 Meridian 693-1926 G. District 7 Hattiesburg 584-6456
 - H. District 8 Gulfport 864-1314
- I. District 9 Brookhaven 833-7811
- II. For all accidents involving Chemicals or Pesticides refer to the Emergency Services Guide for Selected Hazardous Materials, or call CHEMTREC (1-800-424-9300) TOLL FREE; and the Air and Water Pollution Control Commission, John Harper, 601-354-2550 (Office), 601-373-5679 (Home); Environmental Protection Agency (Atlanta) 1-404-881-4062.
- III. For all accidents involving Radiological Materials call the State Health Department:

Radiological	Health	Unit	354-6657
After Hours:		Eddie Fuente	982-2861
		Ron Forsythe	366-2073
		Charles Hilton	362-4047
		John Shoemaker	362-1062
		Ken Waller	956-2051

IV. For all accidents involving Biological Materials call the State Health Department:

Bureau of Disease Control 354-6650 After Hours: Dr. Durwood L. Blakev 857-5966

- For accidents involving Military Ordnance call:
 - 40th Ordnance Detachment, Camp Shelby, Mississippi 583-1745 (24 hrs.) This detachment also has the capability of identification and disposal of explosives or explosive devices and radiological materials.

If explosives are located below the high water mark of seacoasts, inlets, bays and harbors, rivers, canals or any vessel therein call; Commandant, 6th Naval District

Charleston, South Carolina

Disaster Preparedness Office 803-743-4961

Safety Duty Officer 803-743-2890/3892

- VI. For accidents involving Commercial Carriers (buses, trains, trucks, aircraft, and pipelines) call the Public Service Commission.
 - Α. Railroads

Paul W. Gaither (office) 354-7474; (home) 354-8452

Motor Carriers

(office) 354-7265; (home) 956-4643 Keith Howle

Gas Pipelines

Richard E. Sanders (office) 354-7587; (home) 924-9355

- D. Electrical Transmission
 - G.S. Watrous (office) 354-7586; (home) 366-5342