

[JOINT COMMITTEE PRINT]

**BACKGROUND AND ISSUES RELATING TO
THE REAUTHORIZATION OF SUPERFUND**

SCHEDULED FOR HEARINGS
BEFORE THE
COMMITTEE ON FINANCE
ON SEPTEMBER 19 AND ~~20~~³¹, 1984

PREPARED BY THE STAFF
OF THE
JOINT COMMITTEE ON TAXATION



SEPTEMBER 17, 1984

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1984

88-356 O

JCS-34-84

ERRATA SHEET for Joint Committee Pamphlet JCS-34-84 (Sept. 17, 1984), "Background and Issues Relating to the Reauthorization of Superfund"

On cover and on page 1: subsequent to preparation of this pamphlet, the second day of hearings on the Reauthorization of Superfund was set for September 21, rather than September 25.

On page 25, a footnote should be added to the end of Table 7 indicating that under present law lead oxide is taxed at a rate of \$4.14 a ton but would not be taxed under H.R. 5640.

On page 17, Table 3, removal and remediation (column 3), \$94.3 million should read \$194.3 million.

On page 20, footnote 6 is missing. Should read:
6/ Testimony of Harold A. Sorgenti, President of ARCO Chemical Co., before the Senate Environment and Public Works Committee, May 23, 1984.

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INTRODUCTION

The Committee on Finance has scheduled public hearings on the reauthorization of the Hazardous Substance Response Trust Fund on September 19 and 25, 1984. This Fund is provided for under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the tax provisions of which are scheduled to expire on September 30, 1985.

The first part of the pamphlet is a summary. The second part discusses the tax and other provisions of present law (i.e., the Comprehensive Environmental Response, Compensation, and Liability Act and various statutes related to compensation for costs attributable to oil spills). The third part reviews the operation of the current Superfund program. Part four summarizes the provisions of S. 2892 as approved by the Senate Committee on Environment and Public Works on September 13, 1984. S. 2892 extends and expands the Superfund Program authorization statute. Part five explains the provisions of H.R. 5640 as passed by the House of Representatives on August 10, 1984. Part six analyzes the issues relating to the revenue provisions of the bill.

I. SUMMARY

A. Present Law

Hazardous Substance Response Trust Fund

Under present law, excise taxes are imposed on crude oil and certain chemicals, and revenues equivalent to these taxes are deposited into the Hazardous Substance Response Trust Fund ("Superfund"). These amounts are available for expenditures incurred in connection with releases or threatened releases of hazardous substances into the environment. These provisions were enacted in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), which established a comprehensive system of notification, emergency response, enforcement, and liability for hazardous spills and uncontrolled hazardous waste sites.

The crude oil tax of 0.79 cent per barrel is imposed on the receipt of crude oil at a U.S. refinery, the import of crude oil and petroleum products, and the use or export of domestically produced crude oil (if the tax has not already been paid).

The tax on chemicals is imposed on the sale or use of 42 specified organic and inorganic substances if they are produced in or imported into the United States. The taxable chemicals generally are chemicals that are hazardous or chemicals which may create hazardous products or wastes when used. The rates vary from 22 cents per ton to \$4.87 per ton.

The taxes generally will terminate after September 30, 1985. However, the taxes would be suspended during calendar years 1984 or 1985, if, on September 30, 1983, or 1984, respectively, the unobligated trust fund balance were to exceed \$900 million, and if the unobligated balance on the following September 30 would exceed \$500 million, even if these excise taxes were to be suspended for the calendar year in question. Further, the authority to collect taxes will terminate when cumulative receipts from these taxes reach \$1.38 billion.

Post-closure Liability Trust Fund

Effective after September 30, 1983, an excise tax of \$2.13 per dry weight ton is imposed on hazardous waste which is received at a qualified hazardous waste disposal facility and which will remain at the facility after its closure. These tax receipts are deposited into the Post-closure Liability Trust Fund. This trust fund is to assume completely the liability, under any law, of owners and operators of closed hazardous waste disposal facilities which meet certain conditions. No liabilities have yet been assumed by the Trust Fund. These provisions were enacted in CERCLA.

Authority to collect the tax will be suspended for any calendar year after 1984, if the unobligated balance in the Trust Fund ex-

ceeds \$200 million on the preceding September 30. Further, authority to collect the tax will terminate when cumulative receipts from the crude oil and chemical excise taxes described above reach \$1.38 billion, or, if earlier, after September 30, 1985.

B. S. 2892

As ordered reported by the Committee on Environment and Public Works, S. 2892 would extend the Superfund program for five years at a total cost of \$7.5 billion. The bill does not contain specific revenue proposals. Among the program changes provided in the bill are provisions on cleanup standards, fund payment of operation and maintenance costs, provisions for health studies and toxicological profiles, and a five-year, five-state demonstration program to provide assistance to the victims of hazardous waste and toxic chemicals. There are no provisions regarding mandatory cleanup schedules, response authority for leaking underground storage tanks, citizen suits and joint and several liability

C. Revenue Provisions of H.R. 5640

Hazardous Substance Superfund

The bill, H.R. 5640, as passed by the House of Representatives, redesignates the "Hazardous Substance Response Trust Fund" as the "Hazardous Substance Superfund" and extends and expands the Superfund to enable it to carry out the expanded program provided by the bill (including costs of responding to releases of petroleum and petroleum products; the financing of certain emergency relief and health effect studies; certain toxicological profiles, and certain hazard evaluation projects; and a specific schedule for cleanup of hazardous waste sites).

To finance this program, the present law petroleum tax is increased from 0.79 cents per barrel to 7.86 cents per barrel. Similarly, the excise tax on feedstock chemicals is increased and applied to 15 additional feedstock chemicals. These tax rates are subject to a 4-year phase-in and an inflation adjustment. The bill further allows a refund or credit for taxes on exported feedstock substances. The amendments in the petroleum and feedstock chemical taxes are generally effective from January 1, 1985, through September 30, 1990.

Under the bill, the petroleum and feedstock chemical tax rates will be increased further on January 1, 1987, if a hazardous waste disposal tax ("waste-end tax") has not been enacted by July 1, 1986. The Treasury (in consultation with the EPA) is required to develop a legislative proposal for such a tax by April 1, 1985. The Treasury is further required to study (in consultation with the International Trade Commission) the feasibility of imposing a tax on imported substances derived from taxable feedstock chemicals.

The bill generally continues the expenditure purposes of the present law Superfund, but provides that no further funds may be used for the payment of natural resource damage claims. Appropriations of \$2.3 billion to the Superfund from general revenues are authorized for fiscal years 1986 through 1990, for a total (including revenues from the petroleum and feedstock taxes) of approximately

\$10.1 billion over this period. Of the amount of general revenue appropriated, not more than \$850 million is to be allocated to a special account for expenditures related to releases of petroleum or petroleum products, including releases from leaking underground storage tanks. Expenditures for such purposes may be made only from this account.

The bill repeals the Post-closure Liability Trust Fund and the related tax on hazardous waste, effective September 30, 1983. Any amounts paid under that tax are to be refunded to the taxpayers who paid them.

With respect to the program to be conducted using Superfund monies, the House bill requires that no fewer than 1,600 sites be placed on the National Priorities List by 1988 and that the EPA begin cleanup work at no fewer than 150 sites each year. The bill also clarifies the liability of private parties for cleanup costs incurred by the Superfund and permits citizens' suits to force the EPA administrator to perform any act or duty required under CERCLA, as amended, which is not discretionary with the EPA.

Comprehensive Oil Pollution Liability Trust Fund

A House floor amendment¹ to H.R. 5640 establishes a separate Comprehensive Oil Pollution Liability Trust Fund to be financed primarily by a 1.3 cents per gallon "fee" on crude oil. The Trust Fund is to be a separate corporate entity, and the funds are to be used to pay claims for damages caused by oil pollution from vessels or offshore facilities located in navigable waters in the United States. This tax would be suspended if the Trust Fund balance reaches \$200 million, and income from securities held by the Trust Fund would be refunded if the Trust Fund balance were to exceed \$300 million. These provisions generally would be effective 180 days after enactment, and do not have an expiration date.

¹ This floor amendment is identical in substance to H.R. 3278.

II. PRESENT LAW

A. Tax Provisions

1. Hazardous Substance Response Taxes and Trust Fund

Hazardous Substance Response Trust Fund

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) (P.L. 96-510) established a comprehensive system of notification, emergency response, enforcement, and liability for hazardous substance spills and uncontrolled hazardous waste sites.

The Hazardous Substance Response Trust Fund ("Superfund") was established by CERCLA as a trust fund in the Treasury of the United States. Amounts in the Superfund are available for expenditures incurred under section 111 of CERCLA (as enacted) in connection with releases or threats of releases of hazardous substances into the environment. Allowable costs include (a) costs of responding to the presence of hazardous substances on land or in the water or air, including cleanup and removal of such substances and remedial action, (b) payment of claims for injury to, or destruction or loss of, natural resources belonging to or controlled by the Federal or State governments, and (c) certain costs related to response including damage assessment, epidemiologic studies, and maintenance of emergency strike forces.²

Under CERCLA, there are appropriated to the Superfund: (1) amounts equivalent to amounts received in the Treasury under Internal Revenue Code sections 4611 (pertaining to the petroleum tax) and 4661 (pertaining to the tax on certain feedstock chemicals); (2) amounts recovered from responsible parties on behalf of the Superfund under CERCLA; (3) penalties assessed under title I of CERCLA; and (4) punitive damages under section 107(c)(8) of CERCLA (pertaining to damages for failure to provide removal or remedial action upon order of the President).

In addition to these amounts, CERCLA authorizes to be appropriated from general revenues to the Superfund \$44 million per year for fiscal years 1981 through 1985 (i.e., an aggregate of \$220 million) and, for 1985, an additional amount equal to so much of the aggregate authorized to be appropriated for 1981 through 1984 as has not been appropriated before October 1, 1984. Not more than 15 percent of the Superfund receipts attributable to taxes and general revenue appropriations may be used for the payment of natural resource damage claims. CERCLA further provides that claims against the Superfund may be paid only out of the Fund. If, at any

² The Fund also may be used for payment of claims asserted and compensable but unsatisfied under section 311 of the Clean Water Act. All moneys recovered under section 311(b)(6)(B) of the Clean Water Act are appropriated to the Superfund. These claims and moneys involve certain costs arising before the date of enactment of CERCLA.

time, claims against the Fund exceed the balance available for payment of those claims, the claims are to be paid in full in the order in which they were finally determined.

The Superfund has authority to borrow for the purposes of paying response costs in connection with a catastrophic spill or paying natural resource damage claims. Outstanding advances at any time may not exceed estimated tax revenues for the succeeding 12 months; advances for paying natural resource damage claims may not exceed 15 percent of such revenues. All advances must be repaid by September 30, 1985.

The Superfund is managed by the Secretary of the Treasury, who is required to report annually to Congress on the financial condition and operations of the fund.

Petroleum tax

Present law (sec. 4611 of the Code) imposes an excise tax (the "petroleum tax") of 0.79 cent per barrel on domestic crude oil and on petroleum products (including crude oil) entering the United States for consumption, use, or warehousing. The tax on domestic crude oil is imposed on the operator of any United States refinery receiving such crude oil, while the tax on imported petroleum products is imposed on the person entering the product into the United States for consumption, use, or warehousing. If crude oil is used in, or exported from, the United States before imposition of the petroleum tax, the tax is imposed on the user or exporter of the oil.

Domestic crude oil subject to tax includes crude oil condensate and natural gasoline, but not other natural gas liquids. Taxable crude oil does not include oil used for extraction purposes on the premises from which it was produced, such as for powerhouse fuel or for reinjection as part of a tertiary recovery process. In addition, the term crude oil does not include synthetic petroleum (e.g., shale oil, liquids from coal, tar sands, biomass, or refined oil).

Petroleum products which are subject to tax upon being entered into the United States include crude oil, crude oil condensate, natural and refined gasoline, refined and residual oil, and any other hydrocarbon product derived from crude oil or natural gasoline which enters the United States in liquid form. For purposes of determining whether crude oil or petroleum products (and chemicals subject to the feedstock tax) have been produced in, entered into, or exported from the United States, the term United States means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, the Trust Territory of the Pacific Islands, and any possession of the United States. The United States also includes the Outer Continental Shelf areas and foreign trade zones located within the United States. There is no exception for bonded petroleum products. Revenues from the petroleum tax are not paid to Puerto Rico or the Virgin Islands under the cover over provisions of section 7652 of the Code.

Present law specifies that the petroleum tax is to be imposed only once with respect to any petroleum product. Thus, anyone who is otherwise liable for the tax may avoid payment by establishing that the tax already has been imposed with respect to that product.

Amounts equivalent to the revenues from the petroleum tax are deposited in the Superfund.

The petroleum tax is scheduled to expire under present law on September 30, 1985. Present law also provides that if on September 30, 1983, or September 30, 1984, (1) the unobligated balance in the Superfund exceeds \$900 million and (2) the Secretary of the Treasury, after consultation with the Administrator of the Environmental Protection Agency, determines that such unobligated balance will exceed \$500 million on September 30 of the following year if no tax is imposed under section 4611 (relating to the petroleum tax) or section 4661 (relating to the tax on feedstock chemicals) of the Code during the calendar year following the first date referred to above, then no tax is to be imposed during the first calendar year beginning after the first date referred to above. (As of September 30, 1983, the unobligated balance in the Superfund was approximately \$332.8 million.) Further, the authority to collect the tax would terminate when cumulative receipts from the petroleum and chemical taxes reach \$1.38 billion (sec. 303 of CERCLA).

Tax on feedstock chemicals

Present law (sec. 4661 of the Code) also imposes a tax on the sale or use of 42 specified chemical substances ("feedstock chemicals") by the manufacturer, producer, or importer thereof. These chemicals generally are hazardous substances or may create hazardous products or wastes when used. The tax is imposed on feedstock chemicals manufactured in the United States or entered into the United States for consumption, use, or warehousing. The tax rates are specified per ton of taxable chemical, and vary from 22 cents to \$4.87 per ton. In the case of a taxable chemical which is a gas (e.g., methane), the tax is imposed on the number of cubic feet of such gas which is equivalent to 2,000 pounds on the basis of molecular weight. (See table 7 for a list of taxable chemicals and applicable tax rates under present law.)

Present law provides six exemptions from the tax on feedstock chemicals. Under one exemption, in the case of butane and methane, the tax is imposed only if those substances are used other than as a fuel (in which case the person so using them is treated as the manufacturer). A second exemption is provided for nitric acid, sulfuric acid or ammonia (or methane used to produce ammonia) which are used in the manufacture or production of fertilizer or are directly applied as fertilizer. Third, present law also provides an exemption for sulfuric acid produced solely as a byproduct of (and on the same site as) air pollution control equipment. The fourth exemption is for any substance to the extent the substance is derived from coal.

The Tax Reform Act of 1984 (P.L. 98-369) added two further exemptions to the tax on feedstock chemicals. First, the 1984 Act provided an exemption for petrochemicals otherwise subject to the tax (i.e., acetylene, benzene, butane, butylene, butadiene, ethylene, methane, naphthalene, propylene, toluene, and xylene) which are used for the manufacture or production of motor fuel, diesel fuel, aviation fuel, or jet fuel. (The petroleum tax will continue to apply to domestic crude oil or imported petroleum products used for these purposes.) This exception applies if the otherwise taxable sub-

stance is (1) added to a qualified fuel, (2) used to produce another substance that is added to a qualified fuel, or (3) sold for either of the uses described in (1) or (2), above. Second, the 1984 Act provided that the transitory existence of cupric sulfate, cupric oxide, cuprous oxide, zinc chloride, zinc sulfate, barium sulfide or lead oxide during a metal refining process will not be subject to tax if the compound exists in the process of converting or refining non-taxable metal ores or compounds into other (or more pure) non-taxable compounds. (If a substance is removed in the refining process, tax will be imposed even if the substance is later reintroduced to the refining process.) These provisions are effective as if enacted as part of CERCLA.³

Under present law, if a taxpayer uses a taxable chemical prior to any sale, the tax is imposed as if the chemical had been sold. When a taxable chemical is used to manufacture or produce a second taxable chemical, an amount equal to the tax paid on the first chemical is allowed as a credit or refund (without interest) to the manufacturer or producer of the second chemical (but not in an amount exceeding the tax imposed on the second chemical). Thus, the imposition of tax more than once on the same substance is avoided.

Amounts equivalent to the revenues from the tax on feedstock chemicals are deposited in the Superfund.

The tax on feedstock chemicals is scheduled to expire, together with the petroleum tax, on September 30, 1985, with a provision for earlier termination if the unobligated balance in the Superfund exceeds \$900 million (see description under petroleum tax). Further, the authority to collect the tax would terminate when cumulative receipts from the petroleum and chemical taxes reach \$1.38 billion (sec. 303 of CERCLA).

2. Post-closure Tax and Trust Fund

Post-closure Liability Trust Fund

In addition to the Superfund, CERCLA established the Post-closure Liability Trust Fund in the United States Treasury. The Post-closure Liability Trust Fund is to assume completely the liability, under any law (including the liability provisions of CERCLA), of owners and operators of hazardous waste disposal facilities granted permits and properly closed under subtitle C of the Resource Conservation and Recovery Act (RCRA) (Title II of the Solid Waste Disposal Act).⁴ This transfer of liability to the Trust Fund may take place after (1) the owner and operator of the facility has complied with the requirements under RCRA which may affect the performance of the facility after closure, (2) the facility has been closed in accordance with the regulations and the conditions of the permit,

³ In proposed regulations dated October 20, 1983, the Treasury Department took the position that (1) the addition of substances (such as toluene) to gasoline or the use of a light hydrocarbon stream containing taxable chemicals (such as benzene, toluene, or xylene) to make gasoline was subject to tax as a use of feedstock chemicals, and (2) the creation of a metal compound (such as cupric sulfate or similar substances) in a metal refining process would give rise to a tax on use when that substance is consumed in the refining process. The 1984 Act effectively overruled this portion of the proposed regulations.

⁴ The Resource Conservation and Recovery Act (RCRA) provides for the regulation and control of operating hazardous waste disposal facilities, as well as the transportation, storage, and treatment of these wastes. Permits generally are required under RCRA for hazardous waste treatment, storage, or disposal facilities.

and (3) the facility has been monitored (as required by the regulations and permit) for a period not to exceed 5 years after closure to demonstrate that there is no substantial likelihood that any migration offsite or release from confinement of any hazardous substance or other risk to public health or welfare will occur (sec. 107(k) of CERCLA). The transfer of liability is to be effective 90 days after the owner or operator of the facility notifies the Administrator of the Environmental Protection Agency (and the State if it has an authorized program) that the required conditions have been satisfied. No liabilities have been transferred to the Post-closure Trust Fund under present law. In addition to payment of damages and cleanup expenses for such sites, the Trust Fund also may be used to pay costs of monitoring and care and maintenance of a site incurred by other persons after the period of monitoring required by RCRA for facilities meeting the applicable transfer of liability requirements. The Post-closure Trust Fund does not assume the legal liability of waste generators or transporters.

As in the case of the Superfund, claims against the Post-closure Liability Trust Fund may be paid only out of the Fund. If, at any time, claims against the Fund exceed the balance available for payment of those claims, the claims are to be paid in full in the order in which they are finally determined.

The Post-closure Liability Trust Fund is subject to the same administrative provisions as the Superfund, including the right to borrow limited amounts from the Treasury as repayable advances. No more than \$200 million of such advances to the Post-closure Liability Trust Fund may be outstanding at any time.

Tax on hazardous wastes

Present law (sec. 4681 of the Code) imposes an excise tax (the "post-closure tax") of \$2.13 per dry weight ton on the receipt of hazardous waste at a qualified hazardous waste disposal facility. The tax applies only to hazardous waste which will remain at the facility after the facility is closed. The tax is imposed on the owner or operator of the qualified hazardous waste disposal facility. It was intended that amounts equivalent to the revenues from this tax were to be deposited into the Post-closure Liability Trust Fund.

For purposes of the post-closure tax, the term hazardous waste means any waste (1) having the characteristics identified under section 3001 of the Solid Waste Disposal Act, as in effect on December 11, 1980 (other than waste the regulation of which had been suspended by Congress on that date), and (2) which is subject to reporting and recordkeeping requirements under the Solid Waste Disposal Act as in effect on that date. Qualified hazardous waste disposal facilities are facilities which have received a permit or been accorded interim status under the Solid Waste Disposal Act.

The post-closure tax applies to the receipt of hazardous waste after September 30, 1983. However, if as of September 30 of any calendar year after 1983, the unobligated balance of the Post-closure Liability Trust Fund exceeds \$200 million, no tax is to be imposed during the following calendar year. Further, authority to collect the tax would terminate when cumulative receipts from the petroleum and chemical taxes described in the previous section

reach \$1.38 billion, or, if earlier, after September 30, 1985 (sec. 303 of CERCLA).

3. Provisions Relating to Oil Spills

Federal Water Pollution Control Act ("Clean Water Act"), Section 311

Section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1331) establishes a \$35 million revolving fund maintained by fines, penalties, and appropriations of general revenue. The fund may be used for cleanup of releases of oil into navigable waters and restoration of accompanying natural resources. The Act also establishes strict, joint and several liability pertaining to responsibility for cleanup expenses, and authorizes the fund to seek reimbursement from parties who release oil or designated hazardous substances into navigable waters.

The Trans-Alaska Pipeline Authorization Act (TAPAA)

The TAPAA (43 U.S.C. sec. 1651) established a \$100 million Trans-Alaska Pipeline Liability Fund, and required the pipeline system (TAPS) to collect and deposit a \$.05 charge for each barrel of oil passing through TAPS. The Liability Fund is a quasi-public entity, and the fund's revenues are intended to be used to compensate for damages, including cleanup, restoration of natural resources, and economic loss, resulting from spills of oil transported through TAPS. Owners and operators are strictly liable, and the fund may seek to recover its expenses from responsible parties. Because of a \$100 million ceiling to which the Fund is subject, the fee will be suspended for such time as that maximum is achieved and maintained.

Outer Continental Shelf Amendments of 1978

A \$200 million Offshore Oil Pollution Compensation Fund was established in the Treasury by the 1978 amendments of the Outer Continental Shelf Lands Act (43 U.S.C. sec. 1331). This Fund consists of monies generated by a fee of not more than \$.03 a barrel imposed on owners of oil from the Outer Continental Shelf. The fee is collected by the Internal Revenue Service, and may be reduced when the balance in the Fund reaches the \$200 million cap. The Fund may be used to compensate for damages, including cleanup, property damage and loss of income and tax revenue, resulting from spills of oil produced on the Outer Continental Shelf. Liability and financial responsibility requirements for facilities and vessels are defined, and the Fund may seek to recover its expenses from responsible parties. Collection of the fee is not subject to the generally applicable IRS enforcement powers.

Deep Water Port Act of 1974

The Deep Water Port Act of 1974 (33 U.S.C. sec. 1502) established a \$100 million fund to compensate for damages resulting from oil pollution from vessels or facilities engaged in deepwater port operations. This fund is maintained by a \$.02 a barrel fee assessed on oil loaded at a deepwater port. A spiller of deep water port oil is strictly liable for resulting damages. Under S. 1546 as passed by

the House and Senate, collection of the fee would be suspended, but collection could be reinstated by the Secretary of Transportation under certain circumstances.

B. Non-tax Provisions

General provisions

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) provides a statutory scheme to insure prompt response to and cleanup of releases of hazardous substances and to place the burden of such actions on the responsible party or, in the absence of a responsible party, on producers and users of the chemical feedstocks associated with the generation of hazardous substances. In general, the law is designed to allow a governmental response to proceed where necessary, with the parties legally responsible for the release of hazardous substances later being held liable (without regard to fault) for damages and costs resulting from the release. To accomplish this, the law created the Hazardous Substance Response Trust Fund ("Superfund") to be financed by a combination of special environmental taxes and Federal appropriations and to be available for response actions and certain related liability claims.

Under CERCLA, the President is authorized, in the case of a release or threatened release of a hazardous substance pollution or contaminant into the environment, to take whatever removal, remedial or other response action he determines to be appropriate under the National Contingency Plan (originally contained in the Clean Water Act but subsequently revised to apply to CERCLA). Releases subject to CERCLA include any release of a hazardous substance other than work place releases, certain nuclear releases, engine exhausts, and the normal application of fertilizer. Hazardous substances are defined as substances identified in specified sections of the Clean Water Act, the Clean Air Act, the Solid Waste Disposal Act, the Toxic Substance Control Act and those designated under CERCLA. Hazardous substances do not include petroleum (unless specifically designated as hazardous under these laws), or natural or synthetic gases. The Environmental Protection Agency (EPA) is authorized to designate additional substances as hazardous if they present substantial danger to the public health or welfare or to the environment.

CERCLA required the Federal government to develop a national list of sites (the National Priorities List) which are serious enough to require remedial action. This National Priorities List is required to include the 400 most hazardous sites, and is required to be updated annually. In compiling this list, the EPA identifies hazardous sites and evaluates the sites, beginning with a preliminary assessment of available information and proceeding (where appropriate) to an actual site inspection. The sites are then ranked according to criteria relating to relative potential danger from the release or threatened release of hazardous substances into the air, surface water, or groundwater at the site, with the highest ranking sites being selected for the National Priorities List.

Sites which are listed on the National Priorities List are eligible for long-term cleanup actions by EPA, using money derived from

the Superfund. The State in which the site is located generally is required to pay 10 percent of the costs spent in the cleanup (50 percent for State-owned or operated sites). As an alternative to proceeding with such a clean-up, the EPA has authority, under section 106 of CERCLA, to initiate enforcement actions (including civil action and administrative orders) to compel responsible parties to finance cleanup activities. The EPA also has broad authority to enter into negotiations with responsible parties regarding voluntary cleanups or cash settlements. The availability of these alternatives (i.e., negotiations, enforcement, and governmentally funded cleanups) is intended to permit a larger number of sites to be cleaned up than would be possible using any one method.

If a governmental cleanup is initiated, the EPA has further authority to allow the State to take a lead role in site response (cooperative agreements) or (if EPA takes the leading role) to follow various long-term cleanup strategies. The EPA may also initiate removal actions to prevent immediate and significant harm to human life, health, or the environment.

In addition to the cost of cleanup applications, there is authorized to be paid out of the Superfund certain unsatisfied claims for damages resulting from the release of hazardous substances, claims for injury to, or destruction of, natural resources owned or controlled by the Federal or State governments, and specified costs relating to site response or resource restoration. Payment of these claims by the fund transfers to the fund the right of the claimant to sue the party responsible for releasing the hazardous substance; thus, fund representatives may attempt to recover claim payments from the responsible party or parties. There is no general provision for private damage claims against the fund.

Liability

Section 107 of CERCLA imposes liability for cleanup costs incurred under the National Contingency Plan, and for costs associated with natural resource damages, on any person who is the owner or operator of a site or the generator or transporter of hazardous substances released into the environment. A strict liability standard (i.e., regardless of negligence) applies, with only limited defenses (including acts of war, acts of God, and acts of independent third parties where the defendant exercises due care) are allowed. No liability arises with respect to releases permitted under provisions of existing Federal laws or the application of registered pesticides. Liability under the Act is limited generally to \$50 million per release, allowing owners and operators to obtain more readily insurance to cover possible costs. In addition, owners and operators of vessels and offshore facilities are required to maintain evidence of financial responsibility, and the President is authorized to provide financial responsibility requirements for onshore facilities beginning in 1985.

The amounts recovered under the provisions above are deposited in the Superfund. CERCLA also provides for certain penalties and punitive damages which are to be deposited in the fund. These include punitive damages of from one to three times the amount of costs incurred as a result of the failure without sufficient cause, by a person liable for a release or threatened release of a hazardous

substance, to properly provide removal or remedial action upon order of the President pursuant to the Act.

CERCLA also authorizes creation of an Agency for Toxic Substances and Disease Registry to improve data collection and otherwise assist in matters concerning toxic substances and human health.

Related statute: Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) provides for the regulation and control of operating hazardous waste disposal facilities, as well as the transportation, storage, and treatment of these wastes. Permits are required for treatment or storage facilities. The Environmental Protection Agency may sue to require cleanup of an active or inactive disposal site if the site is posing an imminent and substantial hazard to public health and if there is a known, solvent responsible party. However, this provision does not provide funds for cleanup of hazardous waste disposal sites when the owner is unknown, is not responsible, or is financially unable to pay for these costs.

III. OPERATION OF SUPERFUND PROGRAM UNDER PRESENT LAW

A. Superfund Program Activities

Since the Superfund program started operating in 1981, it has been involved mainly in conducting emergency responses ("removal actions") and in identifying and evaluating abandoned waste sites in order to implement long term cleanup ("remedial action"). As of the end of fiscal year 1983, the Environmental Protection Agency (EPA) had identified 16,200 potentially hazardous sites in the United States. As shown in Table 1, preliminary assessments were completed at 7,111 of these sites (44 percent). Of the sites assessed, investigations were completed at 2,197 sites, and 546 were subsequently placed on the National Priorities List (NPL) based on their high degree of hazard. The EPA estimates, assuming current ranking criteria, that between 1,403 and 2,200 sites will ultimately be added to the NPL.

Table 1.—Status of Potentially Hazardous Waste Sites

[Number of sites]

Site Status	Through fiscal year 1983	Projected		
		Low	Mid- dle	High
Listed in ERRIS ¹	16,200	22,000	na	na
Preliminary assessment	7,111	15,200	na	na
Site investigation	2,197	4,285	na	na
National Priorities List ²	546	1,403	1,800	2,200

¹ The Emergency Remedial and Response Information System (ERRIS) is an inventory of potentially hazardous sites maintained by the EPA.

² The National Priorities List contains sites determined to require remediation.

Source: Memorandum to Alvin Alm and Lee Thomas from Alvin R. Morris, Director of Superfund Task Force, Environmental Protection Agency, Office of Solid Waste and Emergency Response (December 8, 1983), p. 12. Updated with information provided by EPA's Superfund Reauthorization Task Force.

As shown in Table 2, of the 546 sites on the NPL, the EPA anticipates beginning initial remedial cleanup measures on 55 sites by the end of fiscal year 1984. To date, 6 NPL sites have been cleaned and removed from the NPL. The EPA has implemented more removal actions (which are generally less expensive and shorter term) than remedial actions. By the end of FY 1984, EPA anticipates completing 321 removal actions.

Table 2.— Superfund Program Activities

[Number of sites]

Action	Fiscal year 1981	Fiscal year 1982	Fiscal year 1983	Fiscal year 1984 ¹	Total
<i>Remedial</i>					
Prelim. assessment.....	² 2,610	² 2,610	1,891	4,000	11,111
Site inspection.....	² 823	² 824	550	1,300	3,497
Feasibility study.....	21	30	85	55	172
Design.....	8	8	11	30	57
Initial remedial meas- ure.....	0	12	18	25	55
Completion.....	0	0	0	6	6
<i>Removal</i>					
Immediate.....	33	50	88	150	321
Planned.....	0	1	6	20	27
<i>Enforcement</i>					
Feasibility study.....	0	0	30	25	55

¹ Projected.² Estimate.

Source: Memorandum to Alvin Alm and Lee Thomas from Alvin R. Morris, Director of Superfund Task Force, Environmental Protection Agency, Office of Solid Waste and Emergency Response (December 8, 1983), p. 12. Updated with information provided by EPA's Superfund Reauthorization Task Force.

B. Hazardous Substance Response Trust Fund

Outlays

Funding for remedial and removal actions comes from the Superfund. As a result of the long start-up time required for planning site remediation projects, outlays from the Superfund have been substantially less than receipts. As shown in Table 3, outlays through 1983 were \$235.4 million, about 30 percent of the \$784 million received by the Fund in this period.

No claims for injury to, or destruction or loss of, natural resources have yet been paid by the Fund. However, 57 claims for such damages, totaling \$2.7 billion, have been submitted to EPA. EPA has rejected the claims because they have not been presented to the responsible party and a restoration plan has not been prepared, as required by CERCLA. These claims could be submitted again after these conditions are satisfied.

Table 3.—Status of Superfund Accounts, Fiscal Years 1981–1983

[In millions of dollars]

Item	Fiscal year 1981	Fiscal year 1982	Fiscal year 1983 ¹	Total
<i>Receipts</i>	\$145.0	\$307.4	\$331.6	\$784.0
Transfer from Coast Guard	6.7	0	0	6.7
Excise taxes	127.9	244.0	230.2	602.1
Appropriations (general revenue)	9.0	26.6	40.0	75.6
Interest income	1.3	34.5	61.0	96.8
Recoveries	0	2.3	0.4	2.7
<i>Outlays</i>	8.0	79.6	147.8	235.4
<i>End of year cash balance</i>	136.9	364.8	548.6	na
<i>Budget obligation</i>	40.2	180.7	230.2	451.2
Removal and remediation	30.7	149.0	94.3	374.0
Enforcement program	2.5	8.4	17.7	28.6
Research and development	4.7	13.8	6.8	25.3
Management & support service	2.3	9.5	11.4	23.2
Unobligated balance	104.8	231.5	332.8	na

¹ Fiscal year 1983 data are budget appropriations rather than obligations. Source: (1) Dept. of Treasury, *Treasury Bulletin*, First quarter, Fiscal 1984, p. 208, (2) Dept. of Treasury, "Second Annual Report on the Financial Condition and Results of the operations of the Hazardous Substance Response Trust Fund," (Sept. 30, 1982), p. 6.

Receipts

The primary source of Superfund revenue has been the excise taxes on 42 chemicals ("feedstock tax") and petroleum enacted in 1980. In addition to the feedstock tax, appropriations from general revenues provided about one-tenth of the Superfund's financing in the first three years of operation. Interest income has become an increasingly important source of revenue as the Fund's balance has increased (due to receipts in excess of outlays).

When the Superfund was enacted, it was envisioned that collections from parties responsible for hazardous waste sites would replenish the Trust Fund. However, cost recoveries have been small, with only \$5.06 million collected through May 1984. Cost recovery proceedings are generally initiated after remediation is completed and total costs are known. The EPA expects cost recovery actions could eventually generate \$44 million per year.⁵ Part of the cost of cleaning Superfund sites is paid by responsible parties directly, under settlement agreements with the EPA, and, thus, is not recovered by the Superfund. As shown in Table 4, private parties agreed to expend \$280 million on hazardous waste site cleanups of which \$220 million is allocated to sites on the National Priorities List.

Table 4.—Superfund Settlement Agreements

[In millions of dollars]

Site	Fiscal year 1981	Fiscal year 1982	Fiscal year 1983	Fiscal year 1984	Total
Nat'l Priorities List.....	12.2	42.8	58.3	107.0	220.3
Other	19.0	2.7	33.8	4.6	60.1
Total.....	31.2	45.5	92.1	111.6	280.4

Source: EPA, Superfund Reauthorization Task Force.

Feedstock tax

The feedstock tax has generated about three-quarters of the Superfund receipts, although tax revenues are running 20 percent less than the \$307 million per year rate anticipated in 1980. The shortfall is in part due to the economy-wide recession, during the early part of the period during which the taxes have been effective, which diminished demand for the products that are made from these feedstocks. As shown in Table 5, the portion of the feedstock tax generated from each category (petrochemicals, inorganic chemicals, and petroleum) has been extremely stable, and is remarkably close to the original estimate (65 percent from petrochemicals, 15 percent from inorganic chemicals, and 20 percent from petroleum).

⁵ Memorandum to Alvin Alm and Lee Thomas from Alvin R. Morris, Director of Superfund Task Force, Environmental Protection Agency, Office of Solid Waste and Emergency Response (December 8, 1983).

Table 5.—Revenues from Feedstock Tax ¹

[Dollar amounts in millions]

Feedstock	Fiscal years							
	1981 quarters III-IV		1982 quarters I-IV		1983 quarters I-III		Total 1981-83	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Petrochemicals	\$86	66.2	\$157	65.6	\$108	66.0	\$350	65.9
Inorganic chemicals	24	18.8	42	17.4	29	18.0	95	17.9
Petroleum	19	14.9	39	16.4	25	15.6	84	15.8
Not allocated	0	0.0	1	0.6	1	0.4	2	0.4
Total	129	100.0	239	100.0	163	100.0	531	100.0
Quarterly average	65	.....	60	.....	54	.....	59	.....

¹ In these data, excise taxes are allocated to the fiscal quarter in which the liability arises (which may be earlier than the quarter in which Treasury receives payment).

Source: Dept. of Treasury, Internal Revenue Service, *SOI Bulletin*, Vol. 3, No. 2, (Fall 1983), pp. 31-34; and updated information from the Statistics of Income Branch of the IRS.

The Internal Revenue Service estimates that the feedstock tax, as of June 1983, was paid by 496 companies. Although the average annual feedstock tax liability for 1983 was approximately \$1.3 million per taxpayer, it appears that most of the revenue is collected from a small number of companies with very large production volumes. ARCO Chemical Co. estimates that the 12 largest taxpayers account for almost 70 percent of feedstock tax revenues.⁶

C. Studies

Section 301 of CERCLA required that 9 studies be conducted to evaluate various aspects of the Superfund program and alternatives by December 1984. It was envisioned that these studies would be used by Congress in the course of reauthorizing the Act. The EPA anticipates that drafts of all these studies will be released for public comment by October 15, 1984 (see Table 6).

Table 6.—Studies Required Under Section 301 of CERCLA

Study	Topic
A	Effectiveness of CERCLA and Superfund.
B	Superfund Receipts and Outlays.
C	Projected Future Funding Needs and Threat to Public Health and Welfare.
D	Cost Recoveries and Settlements.
E	Record of State Participation.
F	Impact of Tax on Balance of Trade.
G	Feasibility and Desirability of Alternative Tax Schedules
H&I	Effects of Tax on Copper, Lead, Zinc Oxide, Fertilizer Feedstocks, Coal Derived Substances, and Recycled Metals.

IV. SUMMARY OF S. 2892, AS APPROVED BY THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

As ordered reported by the Committee on Environment and Public Works, S. 2892 would extend the Superfund program for five years at a total cost of \$7.5 billion. The bill does not contain specific revenue proposals, but the Committee intends in its report to suggest alternatives for revising and supplementing the current feedstock taxing mechanism.

Many of the provisions of H.R. 5640 are not included in S. 2892. These include the mandatory cleanup schedules; the response program for leaking underground storage tanks; the provisions for citizen grants; the express imposition of joint and several liability; and, the establishment of a citizen suit program. Some other provisions contained in H.R. 5640 have counterpart provisions in S. 2892. These principally include the provisions requiring Fund payment of operation and maintenance costs and Fund support of a toxicological testing program.

The provisions of S. 2892 most likely to have significant cost impacts are as follows:

Cleanup standards.—S. 2892 expressly defines the degree of cleanup which must occur at Superfund sites. An earlier and more stringent version of this amendment was estimated by EPA to have a five-year cost of \$488 million.

State credit for past expenditures.—This amendment allows a State to receive a credit for pre-Superfund expenditures against the law's required cost-sharing requirement. The maximum cost of this amendment is estimated by EPA as \$39.2 million.

Health studies and toxicological profiles.—This amendment establishes a program for conducting health studies at Superfund sites and for requiring health effects research on selected toxic chemicals for which there is inadequate data. It is authorized at \$50 million per year, or a five year total of \$250 million.

Operation and maintenance costs.—This amendment requires that when the remedial action is pumping and treatment of ground or surface waters, the Fund must provide operation and maintenance costs for a period of five years (which is four more years than current policy). This is estimated by EPA to cost \$215 million over a five year period.

Victims assistance.—This amendment would establish a five-year, five-state demonstration program to provide assistance to the victims of hazardous wastes and toxic chemicals. It is authorized at \$30 million per year, or \$150 million over a period of five years.

V. DESCRIPTION OF H.R. 5640 AS PASSED BY THE HOUSE

A. The Hazardous Substance Superfund

H.R. 5640, which was passed by the House on August 10, 1984, redesignates the "Hazardous Substance Response Trust Fund" as the "Hazardous Substance Superfund" and continues and expands the Superfund by allocating to the Fund amounts equivalent to the revenues derived from expanded taxes on petroleum and feedstock chemicals (discussed below). The bill also authorizes general revenue appropriations to the Fund of an additional \$421 million for fiscal year 1986, \$421 million for fiscal year 1987, \$496 million for fiscal year 1988, \$496 million for fiscal year 1989, and \$496 million for fiscal year 1990 (an aggregate of \$2.3 billion), plus, for each such fiscal year, an amount equal to the aggregate amount authorized but not yet appropriated for prior years. Combined tax and general revenues authorized to be appropriated to the fund for the fiscal years 1985 through 1990 are estimated to be \$10.1 billion. Other amounts allocated to the Fund under present law (including penalties, punitive damages, and amounts recovered on behalf of the Fund) are not affected by the bill.

Under the bill, the expenditure purposes of the Superfund are amended to conform to the expanded list of costs which may be incurred under section 111(c) of CERCLA, as amended by the bill. These include costs incurred in connection with emergency relief and health effects studies; costs incurred in preparing toxicological profiles of certain hazardous substances; and costs incurred in evaluating potential hazards posed by facilities pursuant to petitions filed by any person. Fund amounts will no longer be available for the payment of damage claims for injury to, or destruction or loss of, natural resources owned or controlled by the Federal or State governments as a result of a release or threat of release of a hazardous substance, as presently authorized under section 111(a)(3) of CERCLA. Amounts in the Superfund may be used, under laws enacted after the bill, for a general purpose covered by sections 111(a)(1), (2), or (4) of CERCLA, as in effect on the date of enactment of the bill.

Under the bill, amounts in the Superfund are to be made available for cleanup actions in connection with leaking underground storage tanks that store petroleum or petroleum products. Amounts in the Fund will also be available for expenditures incurred in connection with releases of petroleum (but not natural or synthetic gas) which may present a significant risk to human health. The bill establishes a separate account in the Fund for these expenditures. The amount expended from the account may not exceed \$850 million plus interest, recoveries, and fines, and must be funded out of amounts appropriated from general revenue, and no more than \$850 million of such appropriations may be

placed in the account through fiscal year 1990. This account will also have authority to borrow limited amounts from the primary Superfund. No revenues from the petroleum or feedstock taxes will be placed in this account other than through this borrowing authority. No Superfund amounts, other than amounts in the special account, may be expended for the purpose of responding to such releases of petroleum or petroleum products to which the Superfund's authority applies as a result of the petroleum-related amendments of Title I of the bill, unless such response also qualifies for Superfund expenditures under other provisions of CERCLA.

The bill continues the present law provisions regarding administration of the Superfund, including the authorization to borrow limited amounts from the Treasury as repayable advances for the purpose of responding to catastrophic spills. Any such advances must be repaid before September 30, 1990. The bill also transfers the trust fund provisions to the Internal Revenue Code; this is consistent with recent actions to consolidate various trust fund provisions in the Code but does not affect jurisdiction over these provisions.

These amendments are effective on January 1, 1985.

B. Tax Provisions

1. Excise tax on petroleum

The bill increases the present law environmental excise tax on petroleum from 0.79 cents per barrel tax to 7.86 cents per barrel, effective January 1, 1985. This tax will apply through September 30, 1990. Thus, the bill repeals the termination provisions of present law (sec. 4611(d)), which terminate the tax if the unobligated balance in the Superfund exceeds specified amounts. The bill also repeals section 303 of CERCLA, which provides for termination of the environmental excise taxes when aggregate taxes collected exceed \$1.38 billion.

Under the bill, the petroleum tax will increase to 9.65 cents per barrel if a tax on the disposal of hazardous substances ("waste-end tax"), has not been enacted by July 1, 1986. This increase in the petroleum tax rate would be effective on January 1, 1987.

2. Excise tax on feedstock chemicals

Tax rates

The bill extends and expands the present law environmental excise tax on feedstock chemicals. In particular, the bill provides that specified organic and inorganic substances sold by the manufacturer, producer, or importer will be taxed in accordance with the following table (table 7):

Table 7.—Comparison of Tax Rates on Feedstock Chemicals Under Present Law and H.R. 5640

[Dollars per ton]

Chemical	Present law	H.R. 5640			1988 and thereafter
		1985	1986	1987	
<i>Organic substances</i>					
Acetylene	4.87	29.91	30.00	30.00	30.00
Benzene	4.87	6.60	8.80	9.90	13.20
Butadiene.....	4.87	9.79	13.05	14.69	19.58
Butane.....	4.87	4.87	5.60	6.30	8.40
Butylene.....	4.87	5.15	6.87	7.73	10.30
Coal-derived light oils.....	0	5.02	6.69	7.53	10.04
Coal tars.....	0	1.78	2.37	2.67	3.56
Ethylene.....	4.87	6.89	9.19	10.33	13.78
Methane.....	3.44	3.44	3.44	3.44	4.00
Naphthalen.....	4.87	6.89	9.19	10.33	13.78
Propylene.....	4.87	5.87	7.83	8.80	11.74
Toluene.....	4.87	5.19	6.92	7.78	10.38
Xylene	4.87	10.65	14.05	16.75	22.33
<i>Inorganic substances</i>					
Aluminum sulfate	0	3.52	4.69	5.28	7.04
Aluminum phosphide.....	0	30.00	30.00	30.00	30.00
Ammonia	2.64	2.64	3.52	3.96	5.28
Antimony	4.45	30.00	30.00	30.00	30.00
Antimony trioxide.....	3.75	30.00	30.00	30.00	30.00
Arsenic	4.45	30.00	30.00	30.00	30.00
Arsenic trioxide	3.41	12.97	17.29	19.46	25.94
Asbestos.....	0	5.76	7.68	8.64	11.52
Barium sulfide	2.30	7.13	9.51	10.70	14.26
Bromine.....	4.45	9.73	12.97	14.59	19.46
Cadmium.....	4.45	30.00	30.00	30.00	30.00
Chlorine	2.70	3.05	4.07	4.57	6.10
Chromite	1.52	1.52	1.52	1.52	1.70
Chromium.....	4.45	30.00	30.00	30.00	30.00
Cobalt	4.45	30.00	30.00	30.00	30.00
Copper	0	23.60	30.00	30.00	30.00
Cupic Oxide	3.59	30.00	30.00	30.00	30.00
Cupric sulfate.....	1.87	23.18	30.00	30.00	30.00
Cuprous oxide.....	3.97	30.00	30.00	30.00	30.00
Hydrochloric acid .....	.29	.94	1.25	1.41	1.88
Hydrogen fluoride	4.23	23.50	30.00	30.00	30.00
Lead	0	8.27	11.03	12.41	16.54
Lithium carbonate	0	30.00	30.00	30.00	30.00
Manganese.....	0	22.69	30.00	30.00	30.00
Mercury.....	4.45	30.00	30.00	30.00	30.00
Nickel	4.45	30.00	30.00	30.00	30.00
Nitric acid.....	.24	3.05	4.07	4.57	6.10

Table 7.—Comparison of Tax Rates on Feedstock Chemicals Under Present Law and H.R. 5640—Continued

[Dollars per ton]

Chemical	Present law	H.R. 5640			1988 and thereafter
		1985	1986	1987	
Phosphoric acid.....	0	7.65	10.20	11.48	15.30
Phosphorous.....	4.45	6.65	6.65	6.65	6.65
Potassium dichromate.....	1.69	15.03	20.04	22.54	30.00
Potassium hydeoxide.....	.22	9.83	13.11	14.75	19.66
Selenium.....	0	30.00	30.00	30.00	30.00
Sodium dichromate.....	1.87	18.48	24.64	27.72	30.00
Sodium hydroxide.....	.28	2.82	3.76	4.23	5.64
Stannic chloride.....	2.12	30.00	30.00	30.00	30.00
Stannous chloride.....	2.85	30.00	30.00	30.00	30.00
Sulfuric acid.....	.26	.78	1.04	1.17	1.56
Uranium oxide.....	0	30.00	30.00	30.00	30.00
Vanadium.....	0	30.00	30.00	30.00	30.00
Zinc.....	0	12.48	16.64	18.72	24.96
Zinc chloride.....	2.22	10.55	14.07	15.83	21.10
Zinc oxide.....	0	14.43	19.24	21.65	28.86
Zinc sulfate.....	1.90	8.30	11.07	12.45	16.60

¹ Rate drops to \$15.40 for 1989 and 1990.

For each year, the rates specified in the table are to be adjusted for inflation. In the case of organic substances, the inflation adjustment for any year is to be the percentage by which the average producer price index for basic organic chemicals of the Bureau of Labor Statistics, for the 12-month period ending in September of the preceding year, exceeds the comparable average of the index for the 12 months ending in September 1984. In the case of inorganic substances, the inflation adjustment for any year is to be the percentage of which the average producer price index for basic inorganic chemicals for the 12-month period ending in the preceding September exceeds the comparable averages for the 12 months ending in September 1984. Tax rates will not be reduced below the levels shown in Table 7 even if the producer price index declines; however, if this occurs, the Congress could consider whether such a reduction is appropriate.

The rates provided for in the bill were generally determined by taxing each substance at the lesser of \$30 per ton or a specified percentage of its estimated 1985 selling price. The percentages used for this purpose were 1.5 percent in 1985, 2 percent in 1986, 2.25 percent in 1987, and 3 percent in 1988 and subsequent years. The substances subject to the environmental excise tax are substances which have been found at waste sites, which are feedstocks used in producing substances found at those sites, or which generate haz-

ardous wastes in the manufacture of the taxable substances or products derived therefrom.

For purposes of the feedstocks tax, xylene includes separated isomers of xylene only in the case of imported or exported xylene. The bill also repeals the present law tax on xylene for periods before January 1, 1985. Manufacturers, producers and importers of xylene who have paid the tax under present law will be permitted to obtain a refund of those taxes together with interest. To offset the resulting loss to the Superfund, the tax rates on xylene shown in Tables 7 and 8 incorporate an increase over the rates that would otherwise apply, in order to recapture the tax liable that had been expected under present law for periods before 1985.

Exemptions

The bill repeals the present law exemption for coal-derived substances.

The bill modifies the present law exception for specified nonferrous metallic compounds which have a transitory existence during metal refining or smelting processes to apply that rule to all metallic compounds and barium sulfide rather than the six compounds specified in present law.

The bill retains the present law exemptions for petrochemical feedstock substances used in the production of fertilizer or used as fertilizer and for sulfuric acid produced as a byproduct of pollution control equipment. A conforming amendment is made to the fertilizer exemption to reflect the addition of phosphoric acid to the list of taxable substances.

The bill also provides that the environmental excise tax on feedstock chemicals is not to apply to feedstock chemicals that are exported from the United States. In particular, the bill exempts from tax any taxable substance that is sold by the manufacturer or producer or for export, or for resale to a second purchaser for export. If the purchaser cannot certify that substance will be exported, or if a tax has otherwise been paid on the exported substance, the exporter may claim a refund or credit for the amount of the tax previously paid.

Generally these amendments to the environmental excise tax on chemicals would take effect on January 1, 1985. Under a transitional rule, the rates specified in present law for organic substances would continue to apply through 1987 to any company which had at least 100 employees who are owners of the company on August 1, 1984, if substantially all of the common stock of that company was owned by employees, officers, directors, or their spouses, on that date, this stock ownership came about as a result of an employee buyout or purchase that occurred in December, 1983, and if the parent company had headquarters in Odessa, Texas. These present law rates would be available only with respect to production from facilities which the company or subsidiary owned on August 1, 1984. This transitional rule also applies to organic substances produced by subsidiaries owned by such a company on August 1, 1984.

Alternative tax rates if waste disposal tax not enacted

Under the House bill, if a waste-disposal tax is not enacted by July 1, 1986, increased tax rates on petroleum and feedstock substances will take effect on January 1, 1987. In this event, the petroleum tax will increase to 9.65 cents per barrel and the tax on feedstock substances will increase to the rates per ton indicated in the following table (table 8):

Table 8.—Feedstock Chemical Tax Rates for 1987–1990 if a Waste Disposal Tax Is Not Adopted

[Dollars per ton]

Chemical	1987	1988–89	1990
<i>Organic substances</i>			
Acetylene	35.00	35.00	35.00
Benzene	13.20	15.40	17.60
Butadiene.....	19.58	22.84	26.11
Butane.....	8.40	9.80	11.20
Butylene.....	10.30	12.02	13.73
Coal-derived light oils.....	10.04	11.71	13.39
Coal tars.....	3.56	4.15	4.75
Ethylene.....	13.78	16.08	18.37
Methane.....	4.00	4.67	5.33
Napthalene.....	13.78	16.08	18.37
Propylene.....	11.74	13.70	15.65
Toluene.....	10.38	12.11	13.84
Xylene.....	21.30	21.77	20.53
<i>Inorganic substances</i>			
Aluminum sulfate.....	7.04	8.21	9.35
Aluminum phosphide.....	35.00	35.00	35.00
Ammonia.....	5.28	6.16	7.04
Antimony.....	35.00	35.00	35.00
Antimony trioxide.....	35.00	35.00	35.00
Arsenic.....	35.00	35.00	35.00
Arsenic trioxide.....	25.94	30.26	34.59
Asbestos.....	11.52	13.44	15.36
Barium sulfide.....	14.26	16.64	19.01
Bromine.....	19.46	22.70	25.95
Cadmium.....	35.00	35.00	35.00
Chlorine.....	6.10	7.12	8.13
Chromite.....	1.70	1.98	2.27
Chromium.....	35.00	35.00	35.00
Cobalt.....	35.00	35.00	35.00
Copper.....	35.00	35.00	35.00
Cupric oxide.....	35.00	35.00	35.00
Cupric sulfate.....	35.00	35.00	35.00
Cuprous oxide.....	35.00	35.00	35.00
Hydrochloric acid.....	1.88	2.19	2.51
Hydrogen fluoride.....	35.00	35.00	35.00
Lead.....	16.54	19.30	22.05
Lithium carbonate.....	35.00	35.00	35.00

Table 8.—Feedstock Chemical Tax Rates for 1987-1990 if a Waste Disposal Tax Is Not Adopted—Continued

[Dollars per ton]

Chemical	1987	1988-89	1990
Manganese.....	35.00	35.00	35.00
Mercury.....	35.00	35.00	35.00
Nickel.....	35.00	35.00	35.00
Nitric acid.....	6.10	7.12	8.13
Phosphoric acid.....	15.30	17.85	20.40
Phosphorous.....	7.59	7.59	7.59
Potassium dichromate.....	30.06	35.00	35.00
Potassium hydroxide.....	19.66	22.94	26.21
Selenium.....	35.00	35.00	35.00
Sodium dichromate.....	35.00	35.00	35.00
Sodium hydroxide.....	5.64	6.58	7.52
Stannic chloride.....	35.00	35.00	35.00
Stannous chloride.....	35.00	35.00	35.00
Sulfuric acid.....	1.56	1.82	2.08
Uranium oxide.....	35.00	35.00	35.00
Vanadium.....	35.00	35.00	35.00
Zinc.....	24.96	29.12	33.2
Zinc chloride.....	21.10	24.62	28.13
Zinc oxide.....	28.86	33.67	35.00
Zinc sulfate.....	16.60	19.37	22.13

These rates were generally determined to equal the lesser of (1) a percentage of estimated 1985 selling price equal to 3 percent in 1987, 3.5 percent in 1988, and 4 percent in 1990, and (2) a cap equal to \$35 per ton. (The lower \$6.65 per ton rate for phosphorous would be increased for each of these years). These rates (including the rate for phosphorus) are to be indexed for inflation under the method applicable to the pre-1987 tax.

The conditional increase of tax rates if a waste end tax is not enacted is intended to compensate for the \$1.2 billion in revenue which the committee anticipates will be raised, prior to September 30, 1990, by a waste disposal tax. Implementation of the alternative tax rates described above will not affect the exceptions to, or termination date of, the petroleum or feedstock taxes.

3. Study of tax on imported chemical derivatives

H.R. 5640 also directs the Treasury Department, in consultation with the International Trade Commission, to submit to the Committee on Ways and Means and the Committee on Finance by April 1, 1985, a study of alternatives for taxing imported chemical derivatives. This study is to examine the probable economic effects of the increased feedstock tax on U.S. manufacturers of substances derived from taxed feedstocks. The study is to also address the legality of taxing imported derivatives under the General Agreement on Tariffs and Trade (GATT) Code. Finally, the study is to evaluate

the administrative feasibility of a tax on imported derivatives, including substances that would be subject to the tax, the method for determining the tax rate on these substances and the mechanism for collecting and enforcing the tax.

4. Study of tax on disposal of hazardous wastes

The bill requires the Secretary of the Treasury to submit to the Committee on Ways and Means and the Committee on Finance by April 1, 1985, proposals for a tax on the disposal of hazardous wastes. These proposals are to be presented in legislative form and are to be designed to discourage the disposal of hazardous wastes in environmentally unsound ways.

C. Repeal of Post-closure Tax and Trust Fund

The bill repeals the tax on hazardous wastes under section 4681 of the Code, effective on October 1, 1983, and terminates the Post-closure Liability Trust Fund as of that date. Refunds with interest are to be made to taxpayers who paid taxes on hazardous wastes under section 4681.⁷

D. Non-Tax Provisions Affecting the Hazardous Substance Superfund

Overview

As discussed above, H.R. 5640, as passed by the House of Representatives would extend the funding of the Superfund for 5-years at significantly increased levels. This increase in funding is required primarily by an increase in the number of abandoned hazardous waste sites which are to be cleaned up under the superfund program. The non-tax provisions of H.R. 5640 which will affect the resources available to the Superfund and the demands on the Superfund are outlined below.

Mandatory cleanup schedule

As part of the expanded superfund program, the bill would direct the EPA to place no fewer than 1,600 sites on the National Priorities List by January 1, 1988. The EPA estimates that the Fund provided under present law is adequate to cleanup at most 170 sites. The bill further requires the EPA to initiate remedial investigations and feasibility studies for such sites on a regular schedule beginning as of the date of enactment. Finally, the bill requires EPA to begin on-site work at no fewer than 150 sites each year.

When EPA cooperates with States in the cleanup of hazardous waste sites, the bill would permit States to apply the administrative costs of running their own Superfund programs toward their matching share requirements for response costs (generally 10 percent of such costs); additionally, the bill would clarify that nothing in CERCLA is to be interpreted to preempt the authority to impose taxes to support its own Superfund programs. The bill would fur-

⁷ Section 27(c) of S. 757, the Solid Waste Disposal Act Amendments of 1984, which passed the Senate on July 25, 1984, would repeal the provisions of present law which provide for termination of the tax on hazardous wastes not later than after September 30, 1985.

ther specify that the 90/10 Federal/State matching share formula is to apply to long-term operation and maintenance costs.

Amendments to response and liability provisions

The bill would clarify that liability for abatement orders and cleanup costs under Sections 106 and 107 of CERCLA is to be strict, joint and several. Under this rule, each defendant generally would be liable for the full amount of any combined damages unless the defendant can establish, by a preponderance of the evidence, that the harm caused by a release or threatened release is divisible, in which case the defendant would be liable for only his portion of such harm. In addition to these changes, the bill would clarify the EPA's authority to recover prejudgment interest in cost recovery actions, would specify that EPA response actions may be reviewed only in the context of cost recovery enforcement actions or civil actions under section 106, and would make certain other adjustments and clarifications to the CERCLA response and liability provisions. Amounts recovered under these provisions would be added to the Hazardous Substance Superfund.

Finally, the bill would establish requirements concerning the cleanup of abandoned hazardous waste facilities owned or operated by the Federal Government. The bill would require each relevant agency or department to identify all such facilities, establish a schedule for the cleanup of such facilities, and implement final cleanup plans. The EPA administrator would have the ultimate responsibility for ensuring that the bill's requirements are met and would be empowered to bring legal action against an agency or department that failed to comply with the law.

Citizens' suits

The bill would allow any person who has an interest adversely affected to bring a citizens suit against the administrator of the EPA, alleging failure to perform any act or duty under CERCLA as amended by the bill which is not discretionary with the Administrator. The court would then have jurisdiction to order the EPA Administrator to perform such act or duty.

The bill would also allow affected persons to sue parties responsible for creating waste sites to compel such parties to clean up the facility when it poses an imminent and substantial endangerment to human health.

The bill would provide that citizens' suits (other than suits against the EPA Administrator) may not be brought under certain circumstances where the EPA has commenced and is diligently pursuing equivalent actions, or where response actions or consent decrees (in the case of endangerment actions) are in progress with respect to the alleged violation or endangerment. Additionally, the EPA Administrator, if not named as a party, could intervene in any citizens' suit as a matter of right.

The bill would allow the award of reasonable attorneys' fees to prevailing parties in a citizens suit.

In addition to allowing citizens suits, H.R. 5640 encourages citizen participation by establishing a mandatory program for public participation in remedial decisions by EPA and providing authority for the EPA Administrator to use Superfund money to make

grants to enable affected communities to obtain expert advice and technical assistance in commenting on the agency's proposed plans for action.

Relief for injured individuals

The bill would add two basic provisions pertaining to relief of injured individuals. First, the bill would require the Agency for Toxic Substances and Disease Registry, created under the CERCLA and administered by the Department of Health and Human Services, to prepare toxicological profiles for no fewer than 100 chemicals most frequently found, or posing the greatest risks, at Superfund sites. The profiles, which would be based primarily on a compilation of existing literature and limited testing where necessary, would be required to be prepared at the rate of 25 per year for the next four years. Monies for these studies would come from the Superfund.

Second, the bill would provide any individual or group of individuals the right to petition the EPA Administrator for health effects studies and emergency relief in cases of dangerous exposure to hazardous substances which have been released from dump sites or in the course of a disaster-like chemical fire in response to which EPA has taken a removal action. If the petitioners are able to demonstrate (e.g., through submission of laboratory tests of drinking water) that they are being exposed to a hazardous substance, the Administrator would be required to determine whether such substances may pose a significant risk to their health and whether it is reasonably likely that such substances come from a covered facility. If the Administrator makes such determinations, the bill would require the EPA to conduct a scientific hazardous substance exposure evaluation study of the affected individuals, to be completed within a 6-month period. If the study shows that an exposure to hazardous substances actually does pose a significant risk, EPA would be required immediately to reduce such exposure to safe levels. Actions by the Administrator would include (e.g.) providing alternative drinking water or, in the most egregious cases, emergency relocation.

Leaking underground storage tanks

The bill includes extensive provisions regarding the regulation of leaking underground storage tanks. Under the bill, EPA would be required to develop a regulatory program which will contain such requirements as may be necessary to protect human health and the environment in the case of leaking tanks. Such regulations could include, but need not be limited to, design standards for new tanks and monitoring and corrective action requirements for new as well as existing tanks. In addition, to abate threats to public health, Superfund money would be available to clean up leaks from underground storage tanks, including those tanks which store petroleum or petroleum products.

E. Revenue Effects of Superfund Tax Provisions

Table 9 shows the estimated revenue effect of the Superfund tax provisions (title V) in H.R. 5640 as passed by the House. The proposed tax on crude oil and petroleum products is estimated to gen-

erate \$2.761 billion in additional revenue during the fiscal year 1985-1991 period, while the taxes on chemical feedstocks are estimated to yield an additional \$5.086 billion. The combined impact of these taxes is thus to increase projected Superfund receipts by \$7.847 billion over that period. These estimates assume that the proposed waste-end tax, to be designed to raise \$1.2 billion in revenue, will not be enacted. Should such a tax be enacted, there would be a corresponding reduction of approximately \$0.36 billion in estimated receipts from the tax on crude oil and \$0.84 billion from the taxes on chemical feedstocks. The repeal of the Post-closure Liability Trust Fund tax and the refunding of all taxes paid into that fund is estimated to result in a loss of \$18 million in fiscal year 1985. As a consequence of the changes in the Superfund excise taxes proposed in the bill, it is estimated that there will be a reduction over the period of \$1.958 billion in income tax receipts, producing a total change in net budget receipts for the fiscal year 1985-1991 period of \$5.086 billion.

Table 9. Estimated Revenue Effects of Superfund Tax Provisions in H.R. 5640, Fiscal Years 1985-91

[In millions of dollars]

Item	1985	1986	1987	1988	1989	1990	1991	1985-91
Crude oil tax.....	265	422	492	519	518	516	29	2,761
Chemical feedstocks taxes.....	29	498	797	1,064	1,200	1,415	83	5,086
Total, Hazardous Substance Superfund tax receipts.....	294	920	1,289	1,583	1,718	1,931	112	7,847
Post-closure Trust Fund tax receipts.....	-18							-18
Change in income tax receipts.....	-6	-230	-322	-396	-430	-483	-28	-1,958
Net change in budget receipts.....	207	690	967	1,187	1,288	1,415	83	5,086

F. Comprehensive Oil Pollution Liability Trust Fund

The House bill establishes a separate \$200 million fund, the Comprehensive Oil Pollution Liability Trust Fund, to provide a system of liability and compensation for oilspill damage and removal costs and related purposes. This Trust Fund is to be a separate entity to be funded primarily by a 1.3 cent per barrel fee on oil (including crude oil or any fraction or residue therefrom) which is (1) received at a United States refinery, (2) entered into the United States for consumption, use, or warehousing, or (3) produced from a U.S. well and subsequently used in or exported from the United States. Only one fee is to be imposed with respect to any particular oil. The fee is to remain in effect at any time when the amount in the trust fund is less than \$200 million. Additionally, if the Trust Fund exceeds \$300 million, income from securities held by the Trust Fund is to be rebated to owners of oil who contributed fees to the Trust Fund on a pro rata basis.

The Secretary of Transportation is to promulgate regulations establishing procedures for collection of the 1.3 cent per barrel fee. The Secretary of Transportation would also be responsible for designating spills eligible for payment of damage claims under the Fund and for administering the Trust Fund, which would be established as a nonprofit corporate entity. Persons failing to pay the fee are liable for civil penalties not exceeding \$10,000.⁸

Amounts in the oil spill liability trust fund are to be available for (1) immediate payment of costs incurred in cleaning up or preventing oil pollution ("removal costs"), including costs incurred by government officials in carrying out oil pollution cleanup requirements under the Federal Water Pollution Control Act, the Intervention on the High Seas Act, and the Deepwater Port Act, (2) payment of reasonable costs incurred by a governmental trustee of natural resources in assessing damaged resources and preparing a plan to restore damaged resources or acquire replacement resources, (3) payment of otherwise uncompensated damages for economic loss sustained by any United States claimant (including private parties) as a result of oil pollution or the substantial threat of oil pollution, (4) payment of certain contributions to the International Oil Pollution Compensation Fund, and (5) administrative costs. The liability of the fund is not to exceed \$100 million for any single incident. In addition, no claim (other than a claim for removal costs) may be paid to the extent that such payment would reduce the amount in the fund below \$30 million; however, the fund is entitled to borrow money necessary to pay a claim.

Damages for economic loss (item (3) above) which may be claimed under the bill include damages for injury to, or destruction of, real or personal property; loss of subsistence use of natural resources; and loss of profits or impairment of earning capacity for a two-year period beginning on the date the claimant first suffered such loss, but only if 25 percent or more of the claimant's earnings (or, in the

⁸ In addition to the fee, there are to be deposited in the fund amounts recovered or collected by the fund and amounts transferred from the funds established under the Deepwater Port Act and the OCS Lands Act Amendments of 1978. The bill also authorizes the appropriation of necessary amounts to cover administrative expenses until other revenue sources are sufficient for this purpose.

case of seasonal activities, 25 percent of seasonal earnings) are derived from the affected activities. A claimant will generally have the option of recovering damages or removal costs (item (1) above) either from the responsible party or from the trust fund, which may then recover from the responsible party. Liability of responsible parties is to be on a joint and several basis, with defenses only for acts of war, civil war or insurrection, and certain exceptional natural phenomena. However, for any responsible party which is not at fault under the bill, liability is limited to specified amounts. For vessels carrying oil in bulk, other than inland barges, this limit is equal to the greater of \$1 million or \$400 per gross ton, to a maximum of \$40 million.

In the case of removal costs, a responsible party may proceed with a cleanup and subsequently assert claims against the fund if the costs incurred exceed the maximum liability of the responsible party or if the party has a defense against liability under the bill. Additionally, to encourage maximum participation in cleanups, foreign claimants may assert claims for cleanup costs under specified circumstances.

Potentially responsible parties under the bill include oil-carrying vessels and offshore oil facilities (but not land facilities). The bill requires such parties to carry adequate insurance or otherwise show evidence of financial responsibility sufficient to cover their potential maximum liability.

Under the bill, actions for judicial review of final trust fund determinations may be brought in the United States District Court for the district in which the injury occurred or in which the defendant is found. Where appropriate, responsible parties may be joined in such proceedings. The statute of limitations for damage claims is generally the later of (1) three years after the discovery of an economic loss, or (2) six years after the date of the incident resulting in the loss. The bill is intended to provide an exclusive judicial remedy for the removal cost and other damage claims specified in the bill; hence, actions for such damages may be brought only as provided under the bill.

The bill prohibits States from imposing fees to fund oil spill compensation funds which duplicate the purposes of the bill. States having such funds in existence could continue to require contributions for three years following the effective date of the bill. States would not be prohibited from creating new funds to cover damages or activities not covered under the bill, or any new program which was not funded by a direct tax or fee which is paid into the state oil pollution fund.

The oil spill liability fund is to be administered by a nine-member Board of Directors under regulations prescribed by the Secretary of Transportation. These are to include three representatives of parties liable for the 1.3 cent per barrel fee on oil; three representatives of potential claimants against the fund (including State or local governments); and three individuals having particular knowledge and experience in oil spill liability and compensation. The fund is to submit an audit to Congress on an annual basis. The bill specifies that, except as expressly provided in the bill, the fund is not to be deemed an agency or instrumentality of the United States.

These provisions are generally effective 180 days following the date of enactment of the bill. There is no expiration date for the Trust Fund; however, the bill states that, if certain international conventions regarding oil pollution damage and compensation come into force for the United States, the provisions of the bill would be superseded with respect to damages covered by the conventions. In this event, other damages would continue to be compensable as provided under the bill.

VI. ISSUES RELATING TO THE REAUTHORIZATION OF SUPERFUND

A. Funding Level of the Superfund Program

Two main issues which arise in considering the appropriate level of funding for the Superfund program are: (1) the ultimate cost of cleaning up all the sites which pose an environmental threat; and (2) the rate at which these sites should be cleaned up.

The Environmental Protection Agency recently estimated that the Federal cost of remediating all current and future sites on the National Priorities List will total \$9.1-14.5 billion in 1983 dollars (under moderate groundwater contamination assumptions).⁹ Some have argued that these estimates are too low because of optimistic assumptions concerning the total number of hazardous sites which exist and the proportion of these which will be cleaned up by private parties. The General Accounting Office has reviewed this estimate and concluded that the cost of cleanup could be as high as \$26 billion.¹⁰ These costs could, under H.R. 5640, be even higher due to the more stringent remediation standards, the expansion of the Fund's response authority with respect to releases of petroleum and petroleum products, and the greater Federal share of site maintenance costs provided by the bill. Thus, there is little doubt that the \$10.1 billion of funding provided by H.R. 5640 will eventually be required.

The second issue related to funding levels is the rate at which the sites should be cleaned up. H.R. 5640 provides a specific schedule for the various phases of cleanup, including minimum number of completions, remedial investigations and feasibility studies, and initial remedial actions each year. If the schedule is adhered to, the 546 sites currently on the National Priorities List would be cleaned up within five years; part of the purpose of considering this legislation well before the expiration of the current taxes is to allow the early commencement of the planning studies necessary to meet this schedule. Compliance with the cleanup schedule provided in H.R. 5640 would be likely to exhaust the \$10.1 billion of taxes and general revenues by the end of fiscal year 1990.

However, there is some controversy over the rate at which the Superfund can efficiently spend its resources. Hazardous waste cleanup projects require lengthy site analysis, planning, preliminary engineering, and design work. This is particularly the case at sites where groundwater contamination is involved. Given the long lead time necessary for implementing site cleanups, some have

⁹ Memorandum to Alvin Alm and Lee Thomas from Alvin R. Morris, Director of Superfund Task Force, Environmental Protection Agency, Office of Solid Waste and Emergency Response (December 8, 1983), p. 12.

¹⁰ General Accounting Office, "EPA's Preliminary Estimates of Future Hazardous Waste Cleanup Costs are Uncertain," RCED-84-162, (May 7, 1984).

argued that the EPA will be able to spend productively over the 1986-1990 period less than half the revenue provided by H.R. 5640 in this period.

On this ground, it has been suggested that the Superfund should be reauthorized for a period longer than 5 years, but at a lower annual funding level. Alternatively, given the uncertainty about the rate at which the Superfund can be spent, it may be desirable to terminate the Superfund taxes if a large balance builds up in the Fund. The 1980 Act, for example, contains a trigger mechanism which temporarily suspends the feedstock tax if the Superfund balance exceeds \$0.9 billion and would not fall below \$0.5 billion in the subsequent year. This type of trigger could guard against excessive prepayment into the Superfund.

On the other hand, opponents of this type of trigger argue that it would effectively enable the EPA to control the level of Superfund taxes by manipulating the rate at which outlays are made from the Superfund. In addition, taxpayers would be less certain about their potential Superfund tax liability over the 5-year reauthorization period. It is also argued that without the assurance of adequate revenues, preliminary planning and design activities will be hampered, and the ultimate schedule of cleanup could be significantly delayed. Finally, given the lead time necessary to plan cleanup projects, the Superfund tax might be triggered off just as the demand for fund resources sharply rises in the construction phase of the program.

In addition to the proper rate at which Superfund monies are to be spent, other programmatic issues arise in connection with H.R. 5640. For example, H.R. 5640 allows Superfund monies to be spent on cleaning up releases of oil and petroleum products, such as releases from leaking underground storage tanks, although the bill provides that these expenditures are to be funded from general revenues rather than excise tax revenues. In addition, under the bill, the fund may be used for health effect studies and toxicological profiles of substances found at sites.

H.R. 5640 restricts the uses of the Superfund in one respect. Under present law States and the Federal government may be compensated for damages to government-controlled natural resources, such as parks and wildlife. These damage payments are in addition to actual costs of cleaning up hazardous substances. H.R. 5640 provides that the Superfund may not be used to pay these damage claims. It is argued that the present law provision diverts scarce funds from the principal purpose of the program, which is to clean up hazardous waste sites and thus prevent further damage to individuals as well as these natural resources. Further, it is argued that this provision exposes the Federal government to enormous potential liabilities for which no estimates have been made. Because regulations for damage assessment have not yet been issued, only a few States have filed damage claims; however, claims presented by these States total \$2.7 billion. Once the provision is fully implemented, the amount of claims eventually could be much larger. Thus, it was viewed as unwise to allow these amounts, which do nothing to promote cleanup of hazardous substances, to be paid from the Fund. On the other hand, supporters of the current provision argue that Superfund should be used to compensate

for all costs attributable to hazardous substance releases, and that cleanup costs are only a small part of the total costs which these releases impose on society. In many cases, governments whose natural resources are affected adversely will have to incur extra expenses to restore or replace these resources even if they were not paid by the fund, since solvent parties responsible for the damages often cannot be located. Of course, general taxpayers finance these expenditures through additional State and local taxes. Thus, if the fund pays for these expenses, they are borne by the users and producers of chemical feedstocks and their derivatives rather than a broader group of taxpayers. Advocates of this provision argue that Fund payment of these damage claims results in a more equitable distribution of this burden.

B. General Revenue Share of Superfund Expenditures

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 established an excise tax on certain chemical feedstocks and petroleum as the primary revenue source for the Federal Superfund. Through fiscal 1983, appropriations from general revenues have amounted to 12.5 percent of excise tax revenues. The Superfund was intended to cover the cost of cleaning sites only where liability could not be traced to a private party.

Payers of the feedstock tax have challenged the equity of this tax. First, the economic beneficiaries of the prior use of cheap waste disposal practices include: past customers of products fabricated in waste producing plants, past stockholders, and past workers. However, the burden of the Superfund feedstock tax falls on current customers, shareholders, and workers. Thus, there is no direct connection between past beneficiaries of cheap waste disposal practices, and the individuals who currently bear the burden of the feedstock tax. Second, companies who pay to remediate all sites for which they are responsible (whether voluntarily or under court order) are, in effect, taxed twice under the feedstock tax. Third, the current excise tax is assessed on chemical feedstocks rather than on the actual hazardous wastes which are commonly found in abandoned disposal sites. Companies outside of the chemical industry that generated these hazardous wastes are not directly taxed under current law. Even if the disposal of hazardous wastes were taxed, as some have suggested, there would be no direct link between current taxpayers and past waste disposers.

On these grounds, it can be argued that general revenues should finance a larger share of Superfund expenditures. Under H.R. 5640, approximately 23 percent of trust fund receipts are derived from general revenues. Unlike many of the other trust funds supervised by the Treasury (e.g., the airport and airway, highway, and inland waterway trust funds), the payers of Superfund taxes do not directly benefit from the facilities which are built and maintained by the Superfund. In western Europe, general revenue financing is the approach generally followed for funding the remediation of abandoned waste sites.

Advocates of the feedstock tax argue that it is appropriate and equitable to place the financial burden of cleaning up hazardous waste sites on the industries responsible for creating the prob-

lem.¹¹ This approach has been followed in other instances where Congress has made the judgment that responsibility for a present problem or condition more properly attaches to a particular segment of the economy rather than the entire body of taxpayers who provide general revenue. For example, under the Black Lung Benefits program, benefits to diseased coal miners and survivors are financed by an excise tax on current coal production. Also, under the Surface Mining and Reclamation Act, reclamation of former surface mining sites is financed by a fee on coal production. Finally, it is argued that in view of the size of the Federal budget deficit it would be irresponsible to finance hazardous waste cleanup significantly from general revenues.

C. Feedstock Tax

CERCLA imposed an excise tax on 42 chemical feedstocks and on petroleum. The main criterion for determining which feedstocks would be subject to tax was the prevalence of hazardous wastes derived from these feedstocks. The basic feedstock tax rates were set at \$4.87/ton for petrochemicals, \$4.45/ton for inorganic chemicals, and \$0.79/barrel for petroleum.¹² These rates were necessary to achieve a \$1.6 billion Superfund program over five years and to allocate 65 percent of the tax burden to petrochemicals, 20 percent to inorganic chemicals, and 15 percent to petroleum. This allocation was based on the respective proportions of derived wastes found in hazardous waste sites. In addition, the feedstock rates were limited to 2 percent of wholesale price (based on data available in 1980).

Exemptions were granted for methane or butane used as a fuel; ammonia, sulfuric acid, and nitric acid used in the production of fertilizer; sulfuric acid produced as a byproduct of air pollution control; and chemicals derived from coal. In addition, section 1019 of the Deficit Reduction Act of 1984 clarified that exemptions would also apply to specified feedstocks used in the production of certain fuels and transitory chemicals which occur in metal refining processes.

H.R. 5640 taxes 15 additional chemical feedstocks including copper, lead and zinc. These 15 feedstocks were added to the list of taxed chemicals under current law on the basis of recent EPA data on the wastes causing the hazards prevalent in disposal sites. The following criteria were applied to this data: (1) The raw material, its intermediate or final product, is found at 1 or more of Superfund sites that are candidates for remedial action as indicated in the Hazard Ranking System (HRS) data base, in a Fund-financed removal action, or in an enforcement action; (2) hazardous wastes generated in making the raw material or a number of its intermediate or final products are found at 2 or more of the HRS sites, in a Fund-financed removal action, or in an enforcement action site; (3) the raw material itself is a designated hazardous substance pursu-

¹¹ According to one study, the chemical and allied products industries are responsible for producing 84 percent of the contaminants found at national priority list sites. See: Management Analysis Center, Inc. "Financing Superfund: An Analysis of CERCLA Taxes and Alternative Revenue Approaches," (June 1984), p. 38.

¹² Compounds (e.g., arsenic trioxide) were taxed at a fraction of the rate imposed on their constituents (i.e., arsenic) based on percentage composition.

ant to CERCLA; (4) hazardous wastes are generated in making the raw material, its intermediate or final products; (5) the raw material is hazardous in a number of forms (e.g., as a raw material, an intermediate or final product); (6) the raw material is capable, in one or more forms, or increasing the hazard potential of other substances; (7) the raw material is hazardous, in some form (e.g., gas, liquid, solid), if released (e.g., spilled).

The revised feedstock tax rates provided in H.R. 5640 were set at 1.5 percent of estimated wholesale price in 1985, phasing up to 3 percent in 1988-1990. The feedstock tax rates were also subject to a cap of \$30 per ton because a number of inorganic feedstock chemicals are very expensive, as a result of scarcity, and thus a tax based on price would have raised too much revenue from these expensive chemicals relative to their contributions to hazardous waste sites. In addition, the feedstock tax rates were indexed to suitable components of the producer price index so that future changes in chemical prices will not change the relative tax burden over time.

The feedstock tax has been criticized as being arbitrary and, potentially damaging to industry. Under the bill, and current law, feedstock taxes are not based on either the degree of hazard associated with wastes derived from these feedstocks or the volume of hazardous waste produced from these chemicals. Thus, it is argued that a tax on the disposal of certain hazardous wastes more equitably places the burden of the tax on the wastes which are being cleaned up by the Superfund.

On the other hand, proponents of the feedstock tax argue that it is successful in accomplishing the stated goal of financing the Superfund program through taxes paid by the industries that account for most of the problem which led Congress to establish the program. According to a report prepared by ICF, Inc. for the EPA, 77 percent of all regulated hazardous wastes are produced by the chemical, petroleum refining, and primary metals industries which are the primary payors of the feedstock tax. Almost all hazardous wastes or substances are made from the feedstocks subject to tax; the vast majority of those substances ranked highly hazardous at waste sites are taxed feedstocks or their derivatives.

Other than the overall level of revenues to be provided by the feedstock taxes, the principal issues appear to be the formula used for setting the rates, the list of taxable substances, and exemptions for particular uses or processes contained in present law or proposed in H.R. 5640.

D. Effect of Feedstock Tax on Trade

Under H.R. 5640, exports are exempted from the excise tax on chemical feedstock. As under current law, imports of feedstocks are subject to tax, as are imports of petroleum and petroleum products, but imports of derivatives produced from taxed feedstocks are not subject to tax. It is argued that the feedstock tax subsidizes imports derived from taxed chemicals, and encourages U.S. chemical companies to manufacture offshore. Imported products that are derived from feedstocks that would have been taxable if produced or sold in the United States escape tax and are, in effect, subsidized by the

Superfund tax. For example, batteries consist mostly of lead and lead oxide. Lead is a taxable feedstock under H.R. 5640; however, imported batteries are not taxed. The Battery Council International estimates that under the bill, the feedstock tax on lead will raise the cost of manufacturing an automobile battery by 15 cents in 1988. Thus, disregarding transportation costs, imported automobile batteries would have a 15-cent cost advantage over those produced in the United States. Similarly, exports of U.S. produced batteries would suffer from a 15-cent cost disadvantage relative to foreign-produced batteries.

While the feedstock tax could, in theory, harm U.S. trade it is unlikely that the actual damage to the U.S. chemical industry is large. The maximum penalty imposed by the H.R. 5640 feedstock tax on any chemical product would be 1.5 percent of the manufacturing cost in 1985, rising to 3-4 percent in 1990 depending on the enactment of a waste-end tax.¹³ In the battery example, the feedstock tax amounts to less than one-half of one percent of the product's retail price. While some segments of the chemical industry are highly competitive, the recent growth in petrochemical imports appears to be attributable largely to the appreciation of the dollar against foreign currencies, and competition from plants established near low cost sources of natural gas in the Middle East and elsewhere.

H.R. 5640 directs the Treasury Department, in consultation with the International Trade Commission, to complete a study for taxing imported chemicals derivatives by April 1, 1985. The purpose of this study is to examine whether a tax on imported derivative would be in violation of the General Agreement on Trade and Tariffs (GATT), and whether such a tax is administratively feasible. For such a proposal to be implemented, a list of derivatives would have to be devised, as well as a method for determining the tax rate on these substances and a mechanism for collecting and enforcing the tax.

Since foreign manufacturers of chemical imports did not generate the wastes found in U.S. disposal sites, it is difficult to argue that they should pay to clean them up. (However, some chemical imports are used in manufacturing processes which generate hazardous wastes.) Without a doubt many environmental regulations (e.g., the Clean Water Act, the Clean Air Act, the Toxic Substance Control Act, the Solid Waste Disposal Act, the Occupational Safety and Health Act, etc.) raise the cost of manufacturing in the United States. However, Congress has not provided systematic trade relief to offset the effects of any such regulations or taxes which affect the costs of domestically produced goods.

H.R. 5640 provides an exemption for feedstocks that are exported. Supporters of this provision argue that such an exemption is necessary to prevent U.S. producers of these exported feedstocks from being adversely affected, vis-a-vis foreign producers of these materials, in their attempt to compete for the business of foreign purchasers. On the other hand, it can be argued that this exemption adversely affects U.S. purchasers of feedstocks, since they will

¹³ This follows from the fact that no chemical feedstock is taxed at more than 1.5 percent of its wholesale price in 1985, rising to 3-4 percent in 1990.

have to compete against, for example, Canadian or Mexican purchasers who would be able to purchase the feedstock on a tax-free basis. These foreign purchasers then could ship derivatives back to the U.S. and set prices without having to take account of the tax paid with respect to U.S. purchasers and users of the feedstock.

E. Disposal ("Waste-end") Tax

H.R. 5640 provides for a reduction in the feedstock tax if a new tax on the disposal of hazardous substances is enacted by July 1, 1986.

Several basic issues arise in the discussion of a disposal ("waste-end") tax in the context of financing Superfund program: incentive effects, predictability of revenues, administrative concerns, trade effects, and appropriate financing sources for the particular expenditures authorized under the program.

Incentive effects

A rationale for the disposal tax, like other pollution taxes, is that the market price of disposal does not reflect the full cost to society. Even waste that is properly disposed of, in a facility regulated under the provisions of the Resource Conservation and Recovery Act (RCRA), may still pose some long-term risk to the public health and welfare. Accidental releases can occur in the transport of hazardous wastes and at disposal facilities. Property values around disposal facilities may be reduced. And if the owner of a hazardous waste facility becomes insolvent, the cost of maintaining the facility is shifted to the government. Thus, in theory, disposal tax rates should vary with the degree of hazard associated with each type of waste and the environmental soundness of the disposal method employed. Treatment and recycling of hazardous wastes should be exempt from tax, and only the untreated hazardous residuals from these processes should be subject to tax upon ultimate disposal.

A disposal tax, unlike a feedstock tax, has the effect of creating a direct economic incentives for waste reduction and safe management. First, at the production level, there is an incentive to adopt manufacturing processes which generate smaller amounts of the more toxic, highly taxed wastes. Second, at the treatment stage, there is an incentive to recycle and otherwise reduce the volume of hazardous wastes which must be disposed of. Finally, at the disposal stage, there is an incentive to use safer methods of waste disposal which are taxed at a lower rate. Thus, the tax, administered by the Internal Revenue Service, could supplement the environmental statutes administered by EPA in attempting to achieve environmental goals.

H.R. 5640 directs the Secretary of the Treasury, in consultation with the EPA and the International Trade Commission, to make legislative recommendations regarding a Federal tax on hazardous waste disposal by April 1, 1985. In principle, a disposal tax might be appropriate to provide revenue for the Superfund program, since it would directly tax many of the materials found at hazardous waste sites.

However, it is unclear if adequate information exists about the degree of hazard of different wastes and the environmental sound-

ness of alternative disposal methods to design a rational disposal tax. According to the Office of Technology Assessment (which supports the concept of a disposal tax) there is insufficient scientific data to determine whether deep well injection is a highly safe method of long-term disposal. A tax which provided lower tax rates or exemptions for certain types of treatment or disposal could increase the amount of waste flowing into low-tax-rate disposal and treatment methods. If these low tax rates and exemptions are based on inadequate scientific data, such a tax could actually increase the amount of environmental damage imposed on society by the generation of hazardous waste. The inability to adequately define hazardous wastes and determine their relative harmfulness, is the primary reason why countries such as France and Germany, which tax the discharge of pollutants into waterways, have not enacted taxes on hazardous waste disposal.

Predictability of revenues

Twenty-three States currently employ or have employed some form of waste-based tax.¹⁴ The General Accounting Office (GAO) recently studied the experience with waste end taxes in New York, California, and New Hampshire, and concluded that¹⁵

* * * the three states (1) have not collected the revenues they anticipated, (2) have not determined if the tax achieved its objective of encouraging more desirable waste management practices, and (3) were concerned that a similar federal tax may reduce state tax revenues or increase the incentive to illegally dispose of hazardous waste. In addition, GAO found that in order to implement similar federal waste-end taxes, more data are needed on the types and quantities of waste generated and the treatment, storage, and disposal methods used. These data are necessary to accurately estimate revenue, measure change in disposal practices, and assure compliance with the tax.

The revenue shortfalls in these States were 39 percent in California, 73 percent in New York, and 93 percent in New Hampshire. Florida replaced its waste-end tax with a feedstock tax in 1983 after discovering that administrative costs exceeded revenues.¹⁶ The State experience with disposal taxes raises the issue that a revenue shortfall might also occur at the Federal level.

Part of the revenue shortfalls experienced at the State level are due to out-of-State disposal of wastes. This type of tax avoidance would not affect a Federal level disposal tax (except to the extent hazardous wastes are exported from the country). A second explanation is that most of the State disposal taxes have been enacted since 1980 and are relatively new. This "learning curve" syndrome may be responsible for the greater than 70 percent revenue shortfall in the Federal disposal tax enacted in the CERCLA of 1980 to

¹⁴ Fred C. Hart Associates, Inc. "CERCLA Funding Options," pp. 21-22.

¹⁵ GAO, "State Experiences With Taxes on Generators or Disposers of Hazardous Waste," (May 4, 1984), p. ii.

¹⁶ ICF, Inc. "Briefing on CERCLA Tax Alternatives," prepared for the Environmental Protection Agency, part II, p. 14.

fund the Post-closure Liability Trust Fund.¹⁷ A third cause of persistent revenue shortfalls is that the disposal tax creates incentives for waste management, both by legal and illegal means. California, in one year, experienced a 28 percent decline in reported waste including a 66 percent decline in extremely hazardous wastes, after enacting a waste-end tax.¹⁸

The limited size of the disposal tax base means that disposal tax rates must be much higher (as a percentage of disposal price) than feedstock tax rates (as a percentage of chemical price) to raise a similar amount of revenue. In combination with State level waste end taxes, a Federal disposal tax could raise the effective tax rate on disposal to the point where serious revenue shortfalls might occur at both levels of government.

At the State level, it appears that some of the hazardous waste reduction is due to "midnight" dumping, waste blending, questionable recycling and treatment operations, and under-reporting of waste volumes.¹⁹ Under-reporting is particularly difficult to detect in the case of on-site disposal, since the waste producer and disposer are the same party. This could be a significant problem for a Federal disposal tax because the EPA estimates that 96 percent of all hazardous waste are disposed of on site. As a result, some argue that an improperly designed disposal tax could seriously undermine compliance with the RCRA reporting requirements.

Ultimately, there may be a conflict between the two major goals of a disposal tax—the provision of revenue for the Superfund program and the encouragement of proper treatment of hazardous wastes. To the extent that the tax applies only to those disposal practices which cause environmental harm and is successful in discouraging such practices, the revenues generated by the tax will decrease. However, the experience with the Superfund program indicates that the revenue needs for cleaning up old sites are likely to increase over time.

Administrative concerns

Some have questioned whether the current RCRA regulatory system is adequate for assessing, collecting, monitoring, and enforcing a disposal tax. Notwithstanding the RCRA regulatory system, every State that has adopted a waste-end tax has found it necessary to develop a separate reporting system.²⁰ The GAO concluded that current data were inadequate for determining the cause of the revenue shortfalls in the State programs, and the extent to which illegal disposal practices may have increased as a result of taxing hazardous waste disposal.

Another lesson from the State experience is the relatively high administrative cost of a disposal tax. The current Superfund tax is imposed on 42 feedstocks and collected from approximately 500 taxpayers. On the other hand, a disposal tax might be imposed on more than 430 wastes regulated under RCRA, and collected from

¹⁷ According to the most recent IRS data, the post-closure tax raised only \$2.4 million in the first quarter of fiscal 1984 relative to fiscal year budget estimates of \$8 million per quarter and estimates of \$25 million per quarter when the tax was enacted in 1980.

¹⁸ ICF, Inc. "Briefing on CERCLA Tax Alternatives," part II, p. 20.

¹⁹ *Ibid.*, pp. 18-19.

²⁰ *Ibid.*, p. 26.

approximately 5,000 on-site and off-site hazardous waste disposal facilities.²¹ The Internal Revenue Service would be required to develop complex regulations covering the hundreds of substances involved, and specifying the taxation of numerous recycling, treatment, and disposal practices.

Further, it is not clear to what extent the RCRA regulatory system is adequate to provide the framework for the administration of a tax. For example, liability for an excise tax generally depends on the occurrence of a taxable event, but the RCRA system is geared to the prevention of certain events (i.e., illegal disposals) which are prohibited under that law. It is unclear at what point legal treatment and/or legal disposal would require the payment of a tax. Some proposed versions of a waste disposal tax would distinguish among storage, treatment, and disposal for purposes of defining the taxable event and whether or not the tax ever applied to a given volume of waste. However, the distinctions among these activities under present law are not always clear.

Further, since RCRA allows approved State programs to administer the Federal requirements, it is unclear to what extent a Federal tax based on RCRA would ultimately be administered by the States, which could vary in their definition of terms and administrative practices.

Also, there is considerable controversy over the RCRA regulations which define hazardous wastes and various management practices, as indicated in the following statement:

Industry and environmentalists alike, unhappy with much of what they already see, have challenged numerous regulations and are involved with EPA in lengthy negotiations over the way those regulations should ultimately read. The States, which administer RCRA, are finding their efforts hobbled because promised Federal aid has not materialized.²²

The House and Senate have adopted amendments to the RCRA which would, *inter alia*, control certain questionable treatment practices under current law and expand the number of generators subject to the statute. If the disposal tax is tied to the RCRA statute, the delays and frequent changes and challenges to EPA's regulations could make it difficult for the IRS to administer the tax and issue its own regulations.

Another issue is whether a waste disposal tax should be levied on a wet weight or dry weight basis. For example, since wastes injected into underground wells are very dilute (90-99 percent water) taxing disposal on a wet weight basis increases the share of the tax burden paid by underground injection relative to land disposal (if the same tax rate applies to both). If desired, the higher water content of wastes injected into underground wells could be accounted for by lowering the tax rate.

Many oppose taxing disposal on a dry weight basis because of the added administrative burden. The cost of determining dry weight content has been estimated to be on the order of \$20 per barrel,

²¹ *Ibid.*, p. 12.

²² Chemical Week, "Getting RCRA Under Control" (June 9, 1982), p. 36.

and can be more than the tax liability. As a result, some small waste generators currently do not bother to determine the dry weight content of their wastes and pay the existing post-closure tax on a wet weight basis. This may put small disposers at a disadvantage relative to large disposers (who have more uniform waste streams and in-house laboratory facilities).

Trade effect

Like the feedstock tax, the disposal tax raises the price of manufacturing certain production in the United States. This effectively taxes exports and subsidizes imports of such products. However, the impact of the disposal tax on individual businesses may be larger than the feedstock tax. The feedstock tax in H.R. 5640 never raises production costs by more than 4 percent, while the disposal tax could amount to a much larger percent of manufacturing costs for products whose fabrication involves large volumes of highly hazardous wastes. These waste-intensive products could be priced out of the market by imports from countries which have few, if any, regulations governing the disposal of hazardous waste. In these cases, U.S. manufacturers might shut down production and possibly establish manufacturing operations in other countries with weaker environmental standards. While many would welcome the export of industries which produce large volumes of hazardous wastes, the cost to the U.S. economy in terms of jobs and income must be considered.

Appropriateness of revenue source

One of the arguments for a waste-end tax is that under a feedstock tax, the burden of financing the Superfund program is not properly placed on many of the industries which produced the hazardous wastes which currently pose an environmental threat. It is argued that since a disposal tax could be more highly correlated with the generation of wastes found at Superfund sites.

Opponents of a waste-end tax respond that this argument is not valid to the extent that a large volume of wastes is not subject to the tax. Wastes which are exported, generated by small generators exempt from RCRA, or are municipal wastes might not be subject to the tax. To the extent the tax is tied to the existing RCRA regulatory system, disposal which falls outside that system would not be subject to the tax.

F. Post-closure Liability Trust Fund

Under current law, the Post-closure Liability Trust Fund transfers legal liability of owners and operators of private disposal sites to the Federal government, provided that such sites are operated and closed according to RCRA requirements, and the EPA determines, 5 years after closure, that there is no substantial likelihood of future release. In exchange for assuming such liability, a tax of \$2.13 per dry-weight metric ton was imposed on the disposal of hazardous wastes at qualified facilities. In effect, the post-closure tax is in lieu of an insurance premium for the coverage of all future claims arising from health and property damage caused by a hazardous waste facility.

H.R. 5640 repeals the Post-closure Liability Trust Fund enacted in 1980 and refunds the taxes collected to finance the Fund. There are several arguments for repeal. First, no estimate has been made of the liability which ultimately could be transferred to the Federal government under this provision. This liability is unlimited, and is governed largely by State and local laws which could change and could cover such items as medical expenses, pain and suffering, and income losses. Thus, the amount of claims against the Fund could be extremely large, and there is concern that the post-closure fund will have inadequate resources to compensate the victims of even a few releases. This could necessitate a large tax increase or use of general revenues to pay these claims. Second, it is argued that the transfer of liability to the government diminishes the incentive to make these facilities safe over the long run. Under the scrutiny of private insurers (to avoid liability attributable to CERCLA and State tort laws), it is claimed that facility operators would continually strive to increase safety in order to keep premiums low. Little assurance that a future damage is unlikely results from a lack of release during the first five years after closure. Further, because storage facilities do not pay the tax, a storage facility which switched its status to that of a disposal facility just before closure could transfer liability to the Fund without ever having paid the tax. Other such mismatches between the tax and eligibility for transfer or liability may be possible; for example, a facility with an interim status permit may be required to pay the disposal tax but, if it never receives a final RCRA permit, will never be able to transfer liability to the fund. In addition, the post-closure fund does not relieve waste generators and transporters from legal liability for damages caused by wastes deposited at a hazardous waste disposal facility.

On the other hand, it is argued that adequate private insurance is not available to cover the long-term liability of operators and owners of waste disposal facilities. Non-sudden environmental impairment insurance policies may be cancelled without cause by the insurer, and are written on a claims-made vs. an occurrence basis. Such a policy would not cover any claim filed after an termination by the insurer even if the damage resulted from a release which occurred when the policy was in force. Thus, repeal of the post-closure fund could leave the public without protection where a policy is cancelled without cause or a facility operator becomes insolvent. Only the Federal government, it is argued, is capable of fully insuring these risks.²³

The EPA is currently studying the question of whether the post-closure fund is, in conjunction with financial responsibility requirements imposed by various environmental statutes, adequate to cover the long-term risks posed by hazardous waste facilities.

As an alternative to repeal, one possibility is to limit the liability of the post-closure fund to sites where the owner and operator are insolvent or the liability of a private party cannot be estab-

²³ See Department of the Treasury, *The Adequacy of Private Insurance Protection under Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980*, June 1984.

ished. This would have the effect of making the post-closure fund similar to the Superfund which covers the cost of cleanup where responsible parties cannot be identified. In addition, the post-closure fund would supplement the Superfund by covering liability for damages for medical costs, income losses, pain and suffering, and other items which would not be compensated by the Superfund.

G. Oil Spill Compensation Provisions

Title IV of H.R. 5640 would establish a Trust Fund to compensate those businesses and individuals for costs and damages attributable to oil spills without the necessity of recovering these amounts through the existing legal system. The Trust Fund administering these compensation payments would be able to recover some or all of these payments through the courts if responsible parties could be located; the remainder of the payments would be financed by a mandatory fee of 1.3 cents per barrel on all crude oil refined or used in the United States.

In support of this provision, it has been argued that the existing court system, under which compensation may be available only after protracted legal proceedings, leaves many of those who suffer losses caused by oil pollution with no compensation for their losses. Thus, for example, owners and employees of businesses in the tourist and fishing industries may suffer reduced income as a result of an oil spill and may not be compensated for part or all of these losses. This occurs because some damage is caused by parties who cannot be located or whose responsibility for the damage cannot be established in court, or even if a responsibility is established, substantial legal expenses may consume a significant part of the damage awards. In some cases these damages may be shifted to a broader group of taxpayers because the Federal government or particular State, or local governments may incur extra expenses as a result of a spill. For example, the Federal government may be required to clean up a spill under environmental laws. Similarly, State or local governments may lose revenue as a result of a decline in business activity attributable to a spill or may incur costs of cleaning up beaches or parks. It is argued that it is more appropriate to use the fee mechanism to place the burden of these unrecovered costs on consumers and producers of oil than on the general taxpayers who finance the activities of governments.

Opponents of administrative victim compensation systems, such as the one established for oil pollution damages by H.R. 5640, argue that it is fundamentally unfair for the Federal government to treat the victims of oil pollution more favorably than other individuals who suffer economic losses. Over many years, Congress has established and refined compensation systems under the Social Security Act to provide payments to individuals for economic losses attributable to circumstances beyond their control (i.e., aging, disability, and unemployment). A hallmark of these systems is that similarly situated individuals are treated similarly, regardless of the exact circumstances which caused the unemployment or disability. Further, the law specifies an exact formula for providing benefits for individuals in these circumstances rather than relying on a hypothetical and speculative determination of what an indi-

vidual's income would have been had the adverse circumstances not occurred.

It is argued that the oil pollution trust fund in H.R. 5640 would be a fundamental departure from these policies. The bill would, in effect, establish a separate governmental unemployment compensation program for the fishing and tourist industries—both owners and employees—on much more favorable terms than such compensation is provided to any other group of U.S. citizens. Other individuals lose wages, profits, and property values on account of circumstances beyond their control, but Congress has not seen fit to indemnify all U.S. citizens for all economic misfortunes. Similarly, the provision to compensate State and local governments for loss of tax revenue singles out certain governments for a special revenue sharing program on very favorable terms. Finally, since no cost estimates are available as to the amount of claims for which liability would be incurred under this bill, the Federal government could be assuming an extremely large liability without careful study as to the economic and fiscal implications of such an action.

