

[JOINT COMMITTEE PRINT]

**BACKGROUND AND ISSUES RELATING TO
HOUSE BILLS FOR REAUTHORIZATION
AND FINANCING OF THE SUPERFUND**

SCHEDULED FOR A HEARING
BEFORE THE
COMMITTEE ON WAYS AND MEANS
ON MAY 9, 1985

PREPARED BY THE STAFF
OF THE
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INTRODUCTION

The Committee on Ways and Means has scheduled a public hearing on the reauthorization of the Hazardous Substance Response Trust Fund ("Superfund") on May 9, 1985. This Fund is provided for under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the tax provisions of which are scheduled to expire after September 30, 1985.

The first part of the pamphlet¹ is a summary. The second part discusses the tax and other provisions of present law. The third part reviews the operation of the current Superfund program. Part four summarizes the Administration's Superfund reauthorization proposal, which was introduced by request, as H.R. 1342. Part five summarizes H.R. 5640, which was passed by the House of Representatives on August 10, 1984, and provided for a five-year extension of the Superfund. (The 98th Congress expired without further action being taken on this bill.) Part six summarizes the other House bills, introduced thus far in the 99th Congress, relating to financing of the Superfund. Part seven analyzes issues relating to the reauthorization and financing of the Superfund.

¹ This pamphlet may be cited as follows: Joint Committee on Taxation, *Background and Issues Relating to House Bills for Reauthorization and Financing of The Superfund* (JCS-13-85), May 8, 1985.

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 and pollutants or contaminants 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.

A 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).

An excise tax on chemical feedstocks is imposed on the sale or use of 42 specified organic and inorganic feedstocks if they are produced in or imported into the United States. The taxable feedstocks generally are hazardous or create hazardous products or wastes when used. The rates vary from 22 cents per ton to \$4.87 per ton. (See Table 1 for a list of current law tax rates on chemical feedstocks.)

These excise taxes will terminate after September 30, 1985. However, the taxes would have been suspended during calendar years 1984 or 1985, if, on September 30, 1983, or 1984, respectively, the unobligated trust fund balance had exceeded \$900 million, and if the unobligated balance on the following September 30 would have exceeded \$500 million, even if these excise taxes were suspended for the calendar year in question. (The unobligated Trust Fund balance was \$374.1 million at the end of fiscal year 1983, and \$295.1 million at the end of 1984.) Further, the authority to collect taxes will otherwise terminate when cumulative receipts from these taxes reach \$1.38 billion. (Cumulative revenues from these excise taxes through September 30, 1984, amounted to \$0.863 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 received at a qualified hazardous waste disposal facility 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 haz-

ardous waste disposal facilities that meet certain conditions. No liabilities have yet been assumed by the Trust Fund. These provisions were enacted in CERCLA.

Authority to collect the tax would be suspended for any calendar year after 1984, if the unobligated balance in the Trust Fund exceeded \$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. (Cumulative receipts from the post-closure tax were \$3 million through the first half of fiscal 1984.)

B. Administration Proposal (H.R. 1342) ²

Tax provisions

The Administration proposal would extend the Superfund through September 30, 1990, and provide a projected \$4.5 billion in tax revenues (\$5.3 billion including interest and recoveries) to the Fund during the extension period. These revenues would be derived primarily from the following sources:

Petroleum and feedstocks chemicals taxes.—A five-year extension of the taxes on petroleum and feedstock chemicals, at their present law rates. These taxes would generally expire after September 30, 1990; however, a special rule would provide for earlier suspension or termination of the taxes if the unobligated Superfund balance exceeds \$1.5 billion. There is also a trust fund provision under which authority to collect the petroleum, feedstock chemical, and waste management taxes would expire when and if cumulative Superfund receipts after September 30, 1985 (i.e., during the reauthorization period) total \$5.3 billion.

Waste management tax.—A tax on the treatment, storage, disposal (including ocean disposal), or export of hazardous wastes ("waste management" tax), effective October 1, 1985. This tax would terminate on September 30, 1990 unless extended through March 31, 1991 in the event of a revenue shortfall. This tax would be imposed at four distinct rates:³ (1) a rate of 25 cents per ton on hazardous waste received at waste water treatment facilities; (2) a rate of \$5 per ton on hazardous waste received at deep well injection facilities; (3) a rate of \$35 per ton, phasing up to \$40 per ton during the reauthorization period, on hazardous waste received at landfills, surface impoundments (other than surface impoundments contained in waste water or deep well injection facilities), waste piles, or land treatment units;⁴ and (4) a rate of \$6 per ton, phasing up to \$7.80 per ton, on any hazardous waste received at all other RCRA permitted units, as well as the export or ocean disposal of hazardous waste. These rates would be further adjusted, beginning October 1, 1987, to compensate for shortfalls from overall Superfund revenue targets. Exemptions would be provided for certain hazard-

² This proposal was introduced by Mr. Broyhill at the request of the Administration.

³ This summary reflects modifications to the waste management tax proposed by the Treasury Department in testimony before the Senate Committee on Finance, April 25, 1985.

⁴ These and other terms generally would be defined by reference to Title II of the Solid Waste Disposal Act, as amended ("SWDA"), also known as the Resource Conservation and Recovery Act ("RCRA").

ous waste disposals pursuant to CERCLA and RCRA and for waste generated at a Federal facility; however, no general exemption would be provided for the treatment of hazardous wastes. The waste management tax is intended to raise approximately two-thirds of the total Superfund tax revenues under the Administration proposal.

The Administration proposal would repeal the present law Post-closure Liability Trust Fund and the associated waste disposal tax (Code secs. 4681 and 4682), effective October 1, 1985. Amounts in the Post-closure Liability Trust Fund at that time would be transferred to the Superfund.

Trust fund provisions

Under the Administration proposal, the substantive trust fund provisions would generally be equivalent to present law. However, the proposal would delete natural resource damage claims (section 111(b) of present law CERCLA) as a permitted Superfund expenditure purpose.

C. Revenue Provisions of H.R. 5640 as passed by the House in 1984

Hazardous Substance Superfund

H.R. 5640 (98th Congress), as passed by the House of Representatives on August 10, 1984,⁵ would have extended and expanded the Superfund program. H.R. 5640 would have provided \$10.1 billion of financing to the Superfund over the 5-year reauthorization period (\$7.8 billion of tax revenues and \$2.3 billion of general revenue appropriations), and would have expanded the program to include: response to releases of petroleum and petroleum products; emergency relief and health effect studies; toxicological profiles and hazard evaluation projects; and a specific schedule for cleanup of hazardous waste sites. (These provisions are discussed in Part V below).

To finance this program, H.R. 5640 would have increased the present law petroleum tax from 0.79 cent per barrel to 7.86 cents per barrel. The excise tax on chemical feedstocks would have been increased and applied to 15 additional feedstocks. (These tax rates would have been subject to a 4-year phase-in and an inflation adjustment.) The bill further allowed a refund or credit for taxes on exported feedstocks. The amendments to the petroleum and chemical feedstock taxes under H.R. 5640 generally would have been effective from January 1, 1985, through September 30, 1990.

Under H.R. 5640, the petroleum and chemical feedstock tax rates would have increased further on January 1, 1987, if a hazardous waste tax ("waste-end tax") had not been enacted by July 1, 1986. The Treasury (in consultation with the Environmental Protection Agency) would have been required to develop a legislative proposal for such a tax by April 1, 1985. The Treasury also would have been required to study (in consultation with the International Trade

⁵ The 98th Congress expired without further action being taken on the bill. See House Committee on Ways and Means Report (H.R. Rep. No. 98-890, part 2, August 8, 1984) for detailed description of the tax and trust fund provisions of H.R. 5640 as passed by the House (other than the floor amendment relating to the Comprehensive Oil Pollution Liability Trust Fund).

Commission) the feasibility of imposing a tax on imported substances derived from taxable chemical feedstocks.

H.R. 5640 generally would have continued the expenditure purposes of the present law Superfund; however, no further funds could have been used for the payment of natural resource damage claims. Appropriations of \$2.3 billion to the Superfund from general revenues would have been authorized for fiscal years 1986 through 1990. Of the amount of general revenue appropriated, not more than \$850 million was 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 were to be made only from this special account.

H.R. 5640 would have repealed the Post-closure Liability Trust Fund and the related tax on hazardous waste, effective September 30, 1983. Any amounts paid under that tax were to be refunded to the taxpayers who paid them.

H.R. 5640 would have required that no fewer than 1,600 sites be placed on the National Priorities List by 1988, and that the Environmental Protection Agency ("EPA") begin cleanup work at no fewer than 150 sites each year. The bill also would have clarified the liability of private parties for cleanup costs incurred by the Superfund, and permitted 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 amendment to H.R. 5640, adopted in 1984, would have established a separate Comprehensive Oil Pollution Liability Trust Fund to be financed primarily by a 1.3 cents per gallon tax on crude oil. This Trust Fund was to be a separate corporate entity, and the funds were 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 have been suspended if the Trust Fund balance reached \$200 million, and income from securities held by the Trust Fund were to be refunded if the Trust Fund balance exceeded \$300 million. These provisions generally would have been effective 180 days after enactment, and did not have an expiration date.

D. Other House Bills Relating to Financing of Superfund

H.R. 1775 (Rep. Moore)—"Superfund Revenue Reauthorization Act of 1985"

This bill is intended to provide \$5.3 billion of financing for the Superfund over the 5-year reauthorization period. Of this amount, \$1.5 billion is from general revenue appropriations, \$0.8 billion is from interest income and the recovery of clean-up costs from responsible parties, and \$3.0 billion is from taxes. The tax revenues are derived from a tax on petroleum and chemical feedstocks, a tax on imported chemical derivatives, and a tax on hazardous wastes:

Petroleum tax.—The current law tax on petroleum and imported petroleum products would be reduced from 0.79 cent to 0.17 cent per barrel.

Chemical feedstocks tax.—The existing list of taxable chemical feedstocks would be expanded to include the same feedstocks taxed under H.R. 5640 as passed by the House in 1984. The tax rates on petrochemical feedstocks would generally be decreased, while the tax rates on inorganic feedstocks would generally be increased (as compared to present law). The tax rates would be indexed for inflation, and a credit or refund would be allowed for exported chemical feedstocks.

The amended petroleum and chemical feedstock taxes would be effective from October 1, 1985, through September 30, 1990, but would be suspended under specified conditions when the unobligated Trust Fund balance exceeded \$1.5 billion.

Imported chemical derivatives tax.—A tax, effective October 1, 1986, would be imposed on imported substances directly and substantially produced from taxable feedstocks (as determined under Treasury regulations). The amount of this tax would be equal to the tax that would have been imposed on the feedstocks used to manufacture the imported substance (if the imported derivative were produced in the United States). If this could not be established, the tax would be equal to 5 percent of the appraised value of the imported substance. This tax would terminate on September 30, 1990.

Tax on hazardous waste.—A tax would be imposed on the receipt of hazardous waste at a facility regulated under the Resource Conservation and Recovery Act ("RCRA") or at an ocean disposal facility. A "backup" tax would be imposed on hazardous waste, not otherwise subject to tax within 270 days of generation, except waste generated by a small generator (100 kilograms or less of hazardous waste per month).

The hazardous waste tax would be imposed at a rate of \$9.80 per ton in fiscal year 1986, increasing to \$16.32 per ton in 1990, for land disposal (including landfills, surface impoundments, waste piles, and land treatment units). A lower rate of \$2.45 per ton (increasing to \$4.08 per ton in 1990) would apply to all other forms of storage or disposal of hazardous waste including underground injection wells. The backup tax would be imposed at the higher rate (reduced to the lower rate on exports). These rates would be increased under a statutory formula if necessary to meet overall Superfund revenue targets. An exclusion from the tax would be provided for biological wastewater treatment facilities meeting RCRA standards and for other forms of treatment having a destruction efficiency at least as great as incineration. Additionally, hazardous wastes associated with certain Superfund response actions would be exempt from the tax.

This tax would generally be effective from October 1, 1985, through September 30, 1990; however, the tax would be extended until March 31, 1991, if necessary to meet the intended 5-year revenue target.

Post-closure Liability Trust Fund.—The bill would repeal the Post-closure Liability Trust Fund and the associated tax on hazardous

waste effective October 1, 1983 (i.e., the original effective date of the tax).

Other trust fund provisions.—The remaining trust fund provisions would be similar to H.R. 5640 as passed by the House in 1984, but would not include a special account for petroleum-related releases.

H.R. 2018 (Reps. Schneider, Wyden and others)—“Hazardous Waste Reduction Act of 1985”

This bill would impose a tax on all forms of land and ocean disposal of hazardous waste that is regulated by the Resource Conservation and Recovery Act (“RCRA”), as well as on exports of hazardous waste and unregulated placements of hazardous waste (subject to certain exceptions). The tax would be intended to raise \$286 million per year as part of a comprehensive Superfund financing package. The tax would be imposed at a rate of \$20 per ton on exports, unregulated placements, and all storage and disposal methods other than underground injection wells. Injection wells would be taxed at a \$5 per ton rate. Hazardous waste rendered nonhazardous within one year of receipt at a treatment, storage, or disposal facility would receive a full credit against the tax. Further, separate exemptions would be provided for qualified wastewater treatment facilities; certain removal or remedial actions under CERCLA; and movement of waste from interim status facilities closed by EPA under RCRA. Tax rates would be increased for any fiscal year during which Treasury estimated that this target would not be met.

The tax under H.R. 2018 would be effective from January 1, 1986, through September 30, 1990. The Treasury Department would be required to submit a report to Congress, by April 1, 1986, on the progress being made in implementing the tax, and a further report (by January 1, 1987) including recommendations (if any) for improving the tax.

H.R. 2022 (Rep. Sikorski and others)—“Superfund Expansion and Protection Act of 1985”

Tax provisions

This bill is intended to raise \$11.7 billion in Superfund revenues (\$1.4 billion in general revenue appropriations and \$10.3 billion of tax revenues) over the 5-year reauthorization period. The tax revenues are derived from the following sources:

Petroleum tax.—An increase in the current law tax on petroleum and imported petroleum products from 0.79 cent to 15.8 cents per barrel.

Chemical feedstocks tax.—A tax on the same list of chemical feedstocks as under H.R. 5640, as passed by the House in 1984, at rates that would have applied under H.R. 5640. (These rates are higher than present law for both organic and inorganic chemicals.) The tax rates would be indexed for inflation, and a credit or refund would be allowed for exported feedstocks. The bill also would require a study of the feasibility of a tax on imported chemical derivatives, but would not actually impose such a tax.

The amended petroleum and chemical feedstock taxes would be effective from October 1, 1985, through September 30, 1990.

Tax on hazardous waste.—A tax, beginning on October 1, 1986, on the receipt of hazardous waste at a RCRA-regulated facility or for purposes of ocean disposal, as well as the export of hazardous waste. This tax would be imposed at a rate of \$5.05 per ton in fiscal year 1987, increasing to \$8.16 per ton in 1990, for land disposal of hazardous waste (including landfills, surface impoundments, waste piles, land treatment units, and underground injection wells). A lower rate of \$1.34 per ton (increasing to \$2.19 per ton in 1990) would apply to export, ocean disposal, and all other forms of storage or disposal of hazardous waste. Exclusions from the tax would be provided for wastes disposed of as part of certain Superfund response activities and for Federally generated waste. Where the tax would not otherwise apply (e.g., "midnight dumping"), a tax would be imposed at the higher statutory rate on the responsible person (subject to certain exceptions).

The tax on hazardous waste generally would be effective from October 1, 1986, through September 30, 1990.

The bill would repeal the Post-closure Liability Trust Fund and the associated tax on hazardous waste, effective October 1, 1983 (i.e., the original effective date of the tax).

Trust fund provisions

The bill would authorize general revenue appropriations of \$280 million per year to the Superfund for fiscal years 1986 through 1990 (an aggregate of \$1.4 billion). The remaining trust fund provisions would be similar to H.R. 5640 as passed by the House in 1984, including the allocation of up to \$850 million of general revenues to a special fund for responding to leaking underground storage tanks and other petroleum-related releases. The bill also contains Superfund expenditure provisions which are similar to provisions of H.R. 5640.

H.R. 2208 (Reps. R. M. Hall and Fields)—"Hazardous Substance Response Act of 1985"

This bill would impose a tax on hazardous wastes designed to raise approximately \$1.5 billion of revenue over a 5-year period. This tax is intended as a partial, rather than an exclusive, source of revenues for the Superfund.

The tax under H.R. 2208 would be imposed on the disposal or long-term storage of hazardous waste (as defined under RCRA). The tax would be imposed on four different categories of wastes: (1) a \$45 per ton rate for hazardous waste disposed of by landfill, in waste piles, or by surface impoundment; (2) a \$25 per ton rate for ocean dumping and land treatment; (3) a \$5 per ton rate for hazardous waste disposed of by underground injection; and (4) a \$45 per ton rate for long-term storage of hazardous waste. A taxpayer who could establish the water content of any hazardous waste could pay an alternate \$50 per ton tax on the "dry weight" of such waste. No tax would be imposed under the bill on the treatment or reclamation of hazardous waste as defined by the bill. Exemptions also would be provided for (1) surface impoundments containing

treated waste water as part of a biological treatment facility, and (2) certain disposals or long-term storage of hazardous waste related to clean-up activities under CERCLA provisions.

The tax would be effective on January 1, 1986, and would expire after September 30, 1990. The Treasury Department (in consultation with EPA) would be required to report to Congress by January 1, 1987, and annually thereafter, concerning the revenues being collected by the tax and recommendations for changes (if any) in the tax.

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: (1) 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; (2) payment of claims for injury to, or destruction or loss of, natural resources belonging to or controlled by the Federal or State governments; and (3) certain costs related to response, including damage assessment, epidemiologic studies, and maintenance of emergency response forces.⁶

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). The petroleum and feedstock chemicals taxes are scheduled to expire after September 30, 1985.

In addition to these amounts, CERCLA authorizes general revenue appropriations to the Superfund of \$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.

⁶ 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.

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 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 after September 30, 1985. Present law also contains provisions which would have temporarily suspended the tax had revenues accumulated faster than a specified rate. If on September 30, 1983, or September 30, 1984, (1) the unobligated balance in the Superfund had exceeded \$900 million, and (2) the Secretary of the Treasury, after consultation with the Administrator of the Environmental Protection Agency, had determined that such unobligated balance would exceed \$500 million on September 30 of the following year (if no tax was imposed under section 4611 or section 4661 of the Code during the calendar year following the first date referred to above), then no tax would have been imposed during the first calendar year beginning after the first date referred to above. (As of September 30, 1984, the unobligated balance in the Superfund was \$295.1 million.) Further, the authority to collect the tax terminates should cumulative receipts from the petroleum and chemical taxes reach \$1.38 billion (sec. 303 of CERCLA). (As of September 30, 1984, cumulative receipts from these taxes amounted to \$0.863 billion.)

Tax on chemical feedstocks

Present law (sec. 4661 of the Code) imposes an excise tax on the sale or use of 42 specified chemical feedstocks by the manufacturer, producer, or importer thereof. These feedstocks generally are hazardous substances or may create hazardous products or wastes when used. The tax is imposed on feedstocks 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 1 for a list of feedstocks and applicable tax rates under present law.)

Table 1.—Present Law Excise Tax on Chemical Feedstocks

[Dollars per ton]

Chemical	Tax rate
<i>Organic substances:</i>	
Acetylene	4.87
Benzene	4.87
Butadiene	4.87
Butane	4.87
Butylene	4.87
Ethylene	4.87
Methane	3.44
Napthalene	4.87
Propylene	4.87

Table 1.—Present Law Excise Tax on Chemical Feedstocks—
Continued

[Dollars per ton]

Chemical	Tax rate
Toluene.....	4.87
Xylene.....	4.87
<i>Inorganic substances:</i>	
Ammonia.....	2.64
Antimony.....	4.45
Antimony trioxide.....	3.75
Arsenic.....	4.45
Arsenic Trioxide.....	3.41
Barium sulfide.....	2.30
Bromine.....	4.45
Cadium.....	4.45
Chlorine.....	2.70
Chromite.....	1.52
Chromium.....	4.45
Cobalt.....	4.45
Cupric Oxide.....	3.59
Cupric sulfate.....	1.87
Cuprous oxide.....	3.97
Hydrochloric acid.....	.29
Hydrogen fluoride.....	4.23
Lead oxide.....	4.14
Mercury.....	4.45
Nickel.....	4.45
Nitric acid.....	.24
Phosphorous.....	4.45
Potassium.....	1.69
Potassium hydroxide.....	.22
Sodium dichromate.....	1.87
Sodium hydroxide.....	.28
Stannic chloride.....	2.12
Stannous chloride.....	2.85
Sulfuric acid.....	.26
Zinc chloride.....	2.22
Zinc sulfate.....	1.90

The tax rates on petroleum and chemical feedstocks were set to achieve a \$1.6 billion Superfund program over 5 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 wastes (derived from these chemicals) found in hazardous waste sites (based on data available in 1980). In addition, the feedstock chemical tax rates were limited to 2 percent of wholesale price (based on data available in 1980).

Present law provides six exemptions from the tax on feedstocks. Four of these exemptions were provided in CERCLA as enacted in 1980, and two exemptions were added by the Tax Reform Act of 1984. First, in the case of butane and methane, the tax is not imposed if those substances are used as a fuel. (If those substances are used other than as a fuel, for purposes of the tax, the person so using them is treated as the manufacturer.) Second, an exemption is provided for nitric acid, sulfuric acid and ammonia (and methane used to produce ammonia) used in the manufacture or production of fertilizer or directly applied as fertilizer. Third, present law provides an exemption for sulfuric acid produced solely as a byproduct of (and on the same site as) air pollution control equipment. Fourth, any substance is exempt to the extent it is derived from coal.

The Tax Reform Act of 1984 (P.L. 98-369) added two further exemptions to the tax on feedstocks. 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 continues to apply to domestic crude oil or imported petroleum products used for these purposes.) This exception applies if the otherwise taxable substance 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 is not 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 is imposed even if the substance is later reintroduced to the refining process.) These provisions were effective as if enacted as part of CERCLA.

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 chemical feedstocks is scheduled to expire, together with the petroleum tax, after September 30, 1985, with a provision for earlier termination if the unobligated balance in the Superfund had exceeded \$900 million. Further, the authority to collect the tax terminates should cumulative receipts from the petroleum and feedstock taxes reach \$1.38 billion (sec. 303 of CERCLA).⁷

⁷ These termination provisions are explained in greater detail in the previous section on the petroleum tax.

2. Post-closure liability 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).⁸

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, 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 yet 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 Liability 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 this Trust Fund. If, at any time, claims against this Trust Fund exceed the balance available for payment of those claims, then 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.

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 that 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 be deposited into the Post-closure Liability Trust Fund.

⁸ The 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, and disposal facilities.

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) that 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 that have received a permit or have 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 had exceeded \$200 million, no tax would have been imposed during the following calendar year. Further, authority to collect the post-closure tax terminates (1) should cumulative receipts from the petroleum and chemical taxes described in the previous section reach \$1.38 billion, or, (2) if earlier, after September 30, 1985 (sec. 303 of CERCLA).

B. Non-tax Provisions

1. 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. The burden of paying for such actions is placed on the responsible party or, where the responsible party cannot be identified or held liable, on producers and users of the chemical feedstocks generally associated with the production 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, CERCLA 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 or a pollutant 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 workplace 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, and 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 and evaluates hazardous 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 EPA long-term cleanup actions, using money from the Superfund. The State in which the site is located generally is required to pay 10 percent of the capital and first-year operating costs of a remedial action (50 percent or greater for State or locally owned or operated sites) and 100 percent of the operating costs in subsequent years.

As an alternative to proceeding with a Superfund financed cleanup, 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., negotiation, enforcement, and Government-funded cleanup) 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 also may initiate removal actions (including removal of hazardous substances, evacuation of affected persons, and other emergency measures) 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.

2. Liability provisions

Section 107 of CERCLA imposes liability for cleanup costs incurred under the National Contingency Plan, and for costs associ-

ated with natural resource damages, on any person who is or was 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, and 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 CERCLA is generally limited to \$50 million per release, allowing owners and operators more readily to obtain insurance for their liability. 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 these liability provisions 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 up 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 provide proper 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.

3. Related statute: Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act ("RCRA") (Title II of the Solid Waste Disposal Act) 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, storage, and disposal 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 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.

The Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616) made various amendments to RCRA. These include: prohibitions against the land disposal of specified types of waste (subject to certain EPA determinations) and against the placing of noncontainerized or bulk liquid hazardous waste in landfills; minimum technological standards and groundwater monitoring requirements for land disposal sites; special rules for generators generating between 100 and 1,000 kilograms of hazardous waste per month; and a ban on underground injection near an underground source of drinking water (with an exemption for RCRA and CERCLA cleanups). The 1984 amendments also included a new regulatory program for underground storage tanks.

4. Other statutory 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. 1321) established a \$35 million revolving fund maintained by fines, penalties, and appropriations of general revenue. The revolving fund may be used for cleanup of releases of oil into navigable waters and restoration of accompanying natural resources. The Act also established strict joint and several liability pertaining to responsibility for cleanup expenses, and authorized 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 is to 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. 1812). 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 the Deep Water Port Act Amendments of 1984 (P.L. 98-419), collection of the fee was suspended; however, collection could be reinstated by the Secretary of Transportation under certain circumstances.

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 1984, the Environmental Protection Agency (EPA) had identified 18,884 potentially hazardous sites in the United States. As shown in Table 2, preliminary assessments were completed at 10,767 of these sites (57 percent). Of the sites assessed, investigations were completed at 3,601 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 2.—Status of Potentially Hazardous Waste Sites

Site status	[Number of sites]			
	Through fiscal year 1984	Projected number of sites		
		Low estimat- ed	Middle estimate	High estimate
Listed in ERRIS ¹	18,884	22,000	NA	NA
Preliminary assessment.....	10,767	15,200	NA	NA
Site investigation	3,601	4,285	NA	NA
National Priorities List ²	538	1,500	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. An additional 244 sites were proposed for listing in October 1984, and another 26 sites were proposed in April 1985.

Source: U.S. Environmental Protection Agency.

As shown in Table 3, of the 546 sites on the NPL, the EPA anticipates beginning initial remedial cleanup measures at 87 sites and completing cleanup at 15 sites by the end of fiscal year 1985. The EPA has implemented more removal actions (which are generally less expensive and shorter term) than it has remedial actions. By the end of FY 1985, the EPA anticipates completing 576 removal actions.

Table 3.—Superfund Program Activities

[Fiscal years]						
Action	1981	1982	1983	1984	1985 ¹	Total 1981-85
Remedial ²						
Preliminary assessment	³ 2,454	³ 2,454	1,891	3,968	5,215	15,982
Site inspection.....	³ 870	³ 870	550	1,311	1,380	4,981
Feasibility study						
Program-lead..	20	30	84	97	69	300
Enforcement-lead.....	0	0	23	36	35	94
Remedial design.....	5	5	6	18	64	98
Remedial action	1	22	19	20	25	87
Completion.....	0	5	1	0	9	15
Removal ⁴						
Completion.....	20	63	102	202	189	576

¹Projected.²Number of sites.³Estimate.⁴Number of actions.

Source: U.S. Environmental Protection Agency.

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 4, outlays through fiscal year 1984 were \$520.7 million, about 45 percent of the \$1,151.7 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 by four States 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 are currently the subject of litigation.

Table 4.—Superfund Accounts, Fiscal Years 1981-1984

[In millions of dollars]

Item	1981	1982	1983	1984	Total, 1981-84
Receipts	153.0	340.8	331.6	386.6	1,212.0
Transfer from Coast					
Guard.....	6.7	0	0	0	6.7
Excise taxes	127.9	244.0	230.2	261.2	863.3
Appropriations from general fund.....	9.4	67.9	61.0	77.9	216.2
Interest income ¹	1.3	34.5	61.0	59.0	155.8
Recoveries.....	0	2.3	0.4	3.4	6.1
Outlays	8.0	79.6	1,476.8	285.3	520.7
End of year cash balance	145.0	406.2	589.9	691.3	NA
Budget obligation	40.3	180.7	230.2	465.6	916.9
Removal and remediation..	30.8	149.0	175.9	366.7	722.4
Enforcement program	2.3	8.4	17.7	26.7	55.0
Research and development.....	4.7	13.8	6.8	10.2	35.5
Management	2.3	9.5	11.4	17.2	40.4
Interagency.....	0.1	0	18.4	44.8	63.5
Unobligated balance	112.0	272.8	374.1	295.1	NA

¹ Including unamortized interest.Sources: (1) Dept. of Treasury, *Treasury Bulletin*, First quarter, Fiscal 1985, p. 210; (2) U.S. Environmental Protection Agency.**Receipts generally**

The primary source of Superfund revenue has been the excise taxes on petroleum and 42 chemicals ("feedstock tax") enacted in 1980. In addition to the excise taxes, appropriations from general revenues provided about 10 percent of the Superfund's financing in the first four 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 \$6.1 million collected through September 1984. Cost recovery proceedings are generally initiated after remediation is completed and total costs are known. The EPA estimates that cost recovery actions will generate \$32 million in fiscal year 1986, \$55 million in 1987, \$85 million in 1988, \$115 million in 1987, and \$190 million in 1990.

Part of the cost of cleaning Superfund sites is paid by responsible parties directly, under consent orders and settlement agreements with the EPA, and is not recovered by the Superfund. As shown in

Table 5, private parties have agreed to expend \$364 million on hazardous waste site cleanups, of which \$297 million involved sites on the National Priorities List.

Table 5.—Hazardous Waste Site Settlements and Unilateral Orders in Compliance

[Value in millions of dollars]

Site	1980	1981	1982	1983	1984	1985 ¹	Total 1980-85
National priorities list.....	0	34.0	12.5	99.3	146.5	4.3	296.6
Other	0.9	19.9	7.9	9.3	23.4	4.9	67.3
Total.....	0.9	53.9	20.4	108.6	169.9	9.1	363.9

¹ Through March 1985.

Source: U.S. Environmental Protection Agency.

Chemical feedstock and petroleum taxes

The chemical feedstock and petroleum excise taxes have generated about three-quarters of the Superfund receipts, although cumulative tax revenues are running 20 percent less than the \$307 million per year rate projected in 1980. The shortfall is in part due to the economy-wide recession in the early part of the period in which the taxes have been effective. Excise tax liability has increased to \$71 million per quarter, in the first two quarters of fiscal year 1984, after declining to \$57 million per quarter in fiscal year 1983 (see Table 6). As shown in Table 6, the portion of the excise taxes 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).

Table 6.—Revenues from Feedstock and Petroleum Taxes ¹

[Dollar amounts in millions]

Taxable substance	Fiscal years—									
	1981 quarters III-IV		1982 quarters I-IV		1983 quarters I-IV		1984 quarters I-II		Total fiscal year 1981-84	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Petrochemicals.....	86	66.2	157	65.6	150	66.1	98	69.0	501	66.7
Inorganic chemicals.....	24	18.8	42	17.4	40	17.6	23	16.2	128	17.0
Petroleum.....	19	14.9	39	16.4	36	15.9	20	14.1	118	15.7
Unallocated.....	0	0.0	1	0.6	1	0.4	1	0.7	4	0.5
Total.....	129	100.0	239	100.0	227	100.0	142	100.0	751	100.0
Quarterly average.....		65		60		57		71		63

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 excise taxes, as of March 1984, were paid by 611 companies. Although the average annual chemical feedstock tax liability for 1983 was approximately \$0.5 million per taxpayer, most of the revenue is collected from a small number of companies with very large production volumes. From June 1981 through March 1984, the 10 largest payers of the excise taxes accounted for approximately 47 percent of the total tax liability.

C. Post-closure Liability Trust Fund

The Post-closure Liability Trust Fund was established under the CERCLA to assume the legal liability of qualified hazardous waste disposal facilities that are properly permitted, operated, and closed under the Resource Conservation and Recovery Act. The Post-closure Liability Trust Fund is financed by a tax on hazardous waste received for disposal at qualified hazardous waste facilities. The tax rate is \$2.13 per ton of hazardous waste on a "dry weight" basis. The tax was first imposed on wastes received in fiscal year 1984 (on or after October 1, 1983). Data on post-closure tax liability are available only for the first two quarters of fiscal year 1984. Post-closure tax liability was \$1.3 million in the first quarter of fiscal 1984, and \$1.7 million in the second quarter. Thus, based on the first two quarters of fiscal 1984, the post-closure tax is generating revenue at a rate of \$6 million per year. This is considerably less than the \$100 million per year that was originally anticipated.

IV. DESCRIPTION OF ADMINISTRATION PROPOSAL

(H.R. 1342)

A. Overview

The Administration proposal⁹ would extend the Superfund through September 30, 1990, and provide a projected \$4.5 billion in tax revenues to the fund during the extension period. These revenues would be derived primarily from (1) an extension of the taxes on petroleum and feedstock chemicals at their present law rates, and (2) a tax on the treatment, storage, disposal, and export of hazardous wastes ("waste management" tax), effective October 1, 1985. The waste management tax is intended to raise approximately two-thirds of the tax revenue under the proposal, and the rates of this tax would be adjusted (if necessary) to cover shortfalls in overall Superfund revenues during the extension period. No money would be made available to the Superfund from general revenues. Approximately \$800 million of additional Fund income is projected from interest, cost recoveries, and fines, for total 5-year revenue of \$5.3 billion.

The Administration proposal would delete natural resources damage claims as a permissible use of the Superfund, impose benchmark cleanup standards for Superfund sites, and make various further changes affecting the use of fund proceeds. No specific schedule for cleanup activities would be provided.

B. Hazardous Substance Superfund

Under the Administration proposal, the Hazardous Substance Response Trust Fund officially would be renamed the "Hazardous Substance Superfund," and would be placed in the trust fund subtitle of the Internal Revenue Code. The Secretary of the Treasury would continue to manage the fund and to report annually to Congress on the financial condition and operations of the fund (Code sec. 9602). The substantive trust fund provisions would generally be the same as under present law, with the following modifications.

First, under the proposal, waste management tax revenues (technically, amounts equivalent to these revenues) would be added to present law Superfund revenue sources.¹⁰ Also, the balance of the Post-closure Liability Trust Fund, as of September 30, 1985, would

⁹ The Administration's original proposal was introduced by Rep. Broyhill, by request, as H.R. 1342. Changes in the Administration's proposal were included in the statement of Mikel M. Rolysen, Tax Legislative Counsel, before the Senate Committee on Finance, Hearings on Reauthorization of the Hazardous Substance Response Trust Fund, April 25, 1985.

¹⁰ Present law revenue sources include the petroleum and feedstock chemical taxes (Code secs. 4611 and 4661), amounts recovered on behalf of the fund under CERCLA (as amended), all moneys recovered or collected under section 311(b)(6)(B) of the Clean Water Act, and penalties and punitive damages under the appropriate sections of CERCLA.

be transferred to the Superfund, in conjunction with the repeal of that Trust Fund (described below).

Second, the proposal would delete natural resource damage claims (section 111(b) of present law CERCLA) as a permitted expenditure purpose. This would leave three permitted expenditure purposes for the Superfund: (1) response costs; (2) related costs described in section 111(c) of CERCLA; and (3) compensable but unsatisfied claims under section 311 of the Clean Water Act.

Third, as under present law, the Superfund would be allowed to borrow from the Treasury, as repayable advances, amounts not exceeding estimated revenues during the next 12 months; however, such advances would not be limited (as they are under present law) to catastrophic spills. All such advances would be required to be repaid on or before September 30, 1990.

The amended trust fund provisions would be effective on October 1, 1985.

C. Tax Provisions

1. Taxes on petroleum and feedstock chemicals

The Administration proposal would continue the taxes on petroleum (Code sec. 4611) and feedstock chemicals (sec. 4661), at their present law rates, through September 30, 1990.

A special rule would provide for suspension or termination of each of these taxes if, on September 30, 1988 or 1989: (1) the unobligated Superfund balance exceeds \$1.5 billion, and (2) the Treasury, after consulting with EPA, determines that this balance will exceed \$1.5 billion on the following September 30th if neither of these taxes or the waste management tax (described below) are imposed during the intervening year. If these conditions are met, the tax would be suspended for one year following the date of the determination. Authority to collect the petroleum, feedstock, and waste management taxes would expire when and if Superfund receipts from sources (including tax revenues, interest, recoveries, and fines) total \$5.3 billion.

2. Waste management tax

Imposition of tax

Under the Administration proposal, a tax would be imposed on (1) the receipt of hazardous waste at a qualified hazardous waste management unit, (2) the receipt of hazardous waste for transport from the United States for the purpose of ocean disposal, and (3) the export of hazardous waste from the United States. The term "hazardous waste" would mean any waste listed or identified under section 3001 of the Solid Waste Disposal Act (SWDA), as amended. (This portion of the SWDA is also known as the Resource Conservation and Recovery Act (RCRA)). The Treasury, in consultation with EPA, would prescribe rules relating to the imposition of tax, if any, on wastes listed under the SWDA after the date of enactment.¹¹

¹¹ The Administration has proposed modifying the tax to apply only to waste listed or identified as of the date of enactment (discussed below).

For purposes of the tax, a qualified hazardous waste management unit is defined as (1) the smallest area of land in or on which hazardous waste is placed or, (2) a structure on or in which hazardous waste is placed, provided that such area or structure isolates hazardous waste within a qualified hazardous waste management facility and is required to obtain interim status or a final permit under Subtitle C of the SWDA. A qualified waste management facility is defined as any facility (as defined under Subtitle C of the SWDA) which has received a permit or has been accorded interim status under section 3005 of the SWDA (or an equivalent State program authorized under section 3006 of that Act). This distinction between units and facilities means that tax would not necessarily be imposed at a qualified facility until hazardous waste is received at a specific unit that isolates hazardous wastes within the overall facility.

The terms "treatment", "storage", and "disposal" would be defined as in section 1004 of the SWDA. The term "ocean disposal" would be defined as the incineration or dumping of hazardous waste over or into ocean waters or certain waters described in the Marine Protection Research and Sanctuaries Act of 1972.

Tax rates

Statutory rates.—The Administration's proposed waste management tax, as included in H.R. 1342, would be imposed at two distinct rates, depending on the treatment or disposal method employed for the hazardous waste.¹²

For hazardous waste received in a landfill, surface impoundment, waste pile, or land treatment unit¹³ (that meets the definition of a qualified hazardous management unit), the tax would be imposed at a rate of \$9.80 per ton for fiscal year 1986. This rate would be "phased up" in each succeeding fiscal year, reaching a maximum rate of \$16.32 for fiscal year 1990 as well as any 1991 extension period (discussed below).

For hazardous waste exported from the United States, received for transport from the United States for purposes of ocean disposal, or received at a qualified hazardous waste management unit other than a landfill, surface impoundment, waste pile, or land treatment unit, the tax rate would be \$2.61 per ton for fiscal year 1986, phasing up to \$4.37 per ton in fiscal 1990 (and any 1991 extension period).

Rate adjustments.—In addition to the phase-up of rates described above, the Administration proposal calls for adjustments in the waste management tax rates, beginning in 1988, to cover any shortfalls of Superfund revenues from all sources (including the petroleum, feedstock and waste management taxes, recoveries, penalties,

¹² The Administration has proposed modifying this provision to impose tax at four different rates: (1) a rate of 25 cents per ton on hazardous waste received at waste-water treatment facilities; (2) a \$5 per ton rate for hazardous waste received at deep well injection facilities; (3) a \$35 per ton rate (phasing up to \$40 per ton) on hazardous waste received at landfills, surface impoundments (other than impoundments contained in waste water or deep well injection facilities), waste piles or land treatment units; and (4) a \$6 per ton rate (phasing up to \$7.80 per ton) on hazardous waste received at all other permitted units, as well as hazardous waste received for ocean disposal or exported from the U.S. (discussed below).

¹³ These terms would be defined as under EPA regulations issued pursuant to sections 3004 and 3005 of the SWDA.

and interest). These adjustments would be made according to a series of statutory formulas. Each fiscal year of the reauthorization period, aggregate Superfund revenues would be compared to preset "projected revenue amounts" (see Table 7). The waste management tax rates would then be increased, beginning in 1988, to cover overall Superfund revenue shortfalls for the year which is two years earlier than the year in question (i.e., 1988 tax rates would compensate for 1986 shortfalls, and so on), with a final adjustment in 1990-91 in order to meet the original 5-year revenue targets. The formulas in the Administration proposal are intended to ensure that revenue targets are met.

Table 7.—Projected Superfund Revenues For Purpose of Implementing Rate Adjustments Under Administration Proposal

[In millions of dollars]

Fiscal Year	Projected overall Superfund revenues
1986.....	\$978
1987.....	989
1988.....	1,035
1990.....	1,093
1991.....	1,205

As a final measure to achieve revenue targets, the proposal allows for a maximum 6-month extension of the tax, at 1990 rates, if aggregate receipts for the period from October 1, 1985 through September 30, 1990 are less than \$5.2 billion.

Exemptions

Two full exclusions from the waste management tax would be provided under the Administration proposal. First, an exclusion would be provided for the treatment, storage, or disposal of any hazardous waste pursuant to a removal or remedial action under CERCLA, where (1) the response action has been selected or approved by EPA, and (2) the release, or threatened release, of the substances which caused the response action occurred before October 1, 1985.¹⁴ Second, hazardous waste generated at a federal facility, and subsequently received at a qualified hazardous waste management unit or exported from the United States, would be exempt from tax. The Administration proposal does not provide an exemption for the treatment of hazardous wastes.

Procedure and administration

Imposition of tax.—Generally, the tax would be imposed on the owner or operator of a qualified hazardous waste management

¹⁴ The Administration has proposed expanding this exemption to include treatment, storage, or disposal pursuant to RCRA corrective actions.

unit. In the case of ocean disposal, tax would be imposed on the owner or operator of the vessel or aircraft that disposes of hazardous waste in or over the ocean. In the case of export, tax would be on the exporter of hazardous waste.

Credit for tax paid.—The proposal includes a mechanism for credits or refunds where tax is paid with respect to hazardous waste and the waste is subsequently received at another qualified unit, received for transport for ocean disposal, or exported from the United States (i.e., where a second taxable event takes place). The amount of this credit is limited to the product of (1) the lesser of (a) the quantity of hazardous waste transferred, or (b) the quantity of hazardous waste on which the tax was previously paid, multiplied by (2) the lesser of (a) the rate of tax payable by the party receiving the hazardous waste, or (b) the rate of tax previously paid on the waste. These limitations prevent a refund for an amount greater than the tax originally paid.

Credits or refunds would be made, without interest, to the person who paid the original tax, following the same procedures as would be used for overpayments of tax.

Information reporting.—Persons subject to the waste management tax would be required to submit to the Treasury such information as may be required in regulations, including (but not limited to) information which is required to be provided to EPA under the SWDA. A penalty of \$25 per day (but not to exceed \$25,000) would be imposed for failure to provide such information, unless it is shown that such failure is due to reasonable cause and not due to willful neglect. The proposal specifies that this is in addition to any other penalty provided by law.

Effective date

The waste management tax would be effective for hazardous waste received or exported after September 30, 1985.

Termination date

The tax would expire after September 30, 1990, unless the Treasury determines that total Superfund receipts for the period October 1, 1985 through September 30, 1990 are less than \$5.2 billion. In that case, the tax would terminate no later than March 31, 1991 (at the 1990 rates). Authority to collect the tax (together with the petroleum and feedstock chemical taxes) would expire earlier than September 30, 1990, when and if Superfund receipts during the reauthorization period (including interest and recoveries) total \$5.3 billion.

3. Proposed Administration modifications to waste management tax

In testimony before the Senate Committee on Finance,¹⁵ the Treasury Department recommended the following modifications to its originally proposed waste management tax, as included in H.R. 1342.

¹⁵ Senate Committee on Finance, Hearings on Reauthorization of the Hazardous Substance Response Trust Fund (Superfund), April 25, 1985 (Statement of Mikel M. Rollyson, Tax Legislative Counsel).

Definition of hazardous waste.—The Treasury Department recommended that the tax be imposed only on hazardous wastes listed or identified under section 3001 of the SWDA as effective on the date of enactment of the proposal, with no administrative procedure for prescribing tax rules on subsequently listed wastes. (A tax on such wastes could be imposed by subsequent Congressional action.)

Tax rates.—The Treasury Department recommended replacing the two-rate structure of its originally proposed tax with a four-rate structure, as follows:

(1) A tax rate of 25 cents per ton on hazardous waste received at wastewater treatment facilities.

(2) A \$5 per ton tax rate on hazardous waste received at deep well injection facilities.

(3) An initial \$35 per ton tax rate, phasing up to \$40 per ton over the 5-year reauthorization period, on hazardous waste received at landfills, surface impoundments (other than impoundments contained in wastewater or deep well injection facilities), waste piles, or land treatment units.

(4) An initial \$6 per ton tax rate, phasing up to \$7.80 per ton over the reauthorization period, on hazardous waste received at all other permitted units, as well as on hazardous waste received for ocean disposal or exported from the United States.

These rates would be adjusted, if necessary, to compensate for shortfalls in overall Superfund revenues, using the formulae provided in H.R. 1342.

Exemption for RCRA corrective actions.—The Treasury Department recommended expanding the exclusion for treatment, storage, and disposal of any hazardous waste pursuant to CERCLA response actions selected or approved by the EPA (as contained in H.R. 1342), to encompass corrective actions ordered pursuant to RCRA. Both the RCRA and CERCLA exemptions would be limited to waste generated prior to the enactment of the proposed legislation.

D. Repeal of Post-closure Liability Tax and Trust Fund

The Post-closure Liability Trust Fund and the associated waste disposal tax (Code secs. 4681 and 4682) under present law would be repealed, effective October 1, 1985. Amounts in the Post-closure Trust Fund at that time would be transferred to the Superfund (as described above).

E. Non-tax Provisions Affecting the Hazardous Substance Superfund

In addition to the tax and trust fund provisions described above, the Administration proposal would make various changes in the non-tax portions of CERCLA. Aspects of the proposal most likely to affect the uses of Superfund proceeds include the following matters:

Scope of activities.—As under present law, the proposal would concentrate Superfund resources on hazardous waste sites (principally, abandoned and uncontrolled sites); municipal and industrial waste sites with problems; and sites governed by RCRA but owned by insolvent companies. However, the proposal also includes a

"safety valve" allowing the President to direct response to any emergency hazardous substance release using Superfund proceeds.

Cleanup standards.—The proposal would establish benchmark cleanup standards for Superfund sites. In general, these standards set levels of protection equal to those established by other environmental statutes, and are intended to promote permanent cleanup solutions at Superfund sites.

State responsibilities.—The State "matching share" of capital cleanup costs would be increased from 10 to 20 percent (from 50 to 75 percent for State-operated sites). However, the proposal also would allow States to enact taxes similar to the Superfund taxes (this is preempted under present law), and allow certain State enforcement costs to be eligible for funding.

Enforcement.—Enforcement provisions would be strengthened in several ways: including an increase in civil and criminal penalties; a provision for imposition of real property liens on responsible parties; and delay of contribution suits between potentially liable parties until after enforcement actions are judged or settled.

Community involvement.—The proposal includes a statutory requirement that affected citizens be notified of proposed cleanup actions, and be given an opportunity to comment.

**DESCRIPTION OF H.R. 5640 AS PASSED BY THE HOUSE
IN 1984**

A. Hazardous Substance Superfund

H.R. 5640 (98th Congress), which was passed by the House on August 10, 1984,¹⁶ would have redesignated the "Hazardous Substance Response Trust Fund" as the "Hazardous Substance Superfund" and would have continued and expanded 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 would have authorized 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 fiscal years 1985 through 1990 were 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) were not affected by the bill.

Under H.R. 5640, the expenditure purposes of the Superfund were to be amended to conform to the expanded list of Superfund activities under section 111(c) of CERCLA, as amended by the bill. These included emergency relief and health effects studies; preparing toxicological profiles of certain hazardous substances; and evaluating potential hazards posed by facilities pursuant to petitions filed by any person. However, fund amounts would no longer have been 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.

Under the bill, amounts in the Superfund were to be made available for cleanup actions in connection with leaking underground storage tanks that store petroleum or petroleum products. Amounts in the Fund also would have been available for expenditures incurred in connection with releases of petroleum (but not natural or synthetic gas) that may present a significant risk to human health. The bill would have established a separate account in the Fund for these expenditures. The amount expended from the

¹⁶ The 98th Congress expired without further action being taken on this bill. See also House Committee on Ways and Means Report (H.R. Rep. No. 98-890, Part 2, August 8, 1984) for a detailed description of the tax and trust fund provisions of H.R. 5640 as passed by the House (other than the floor amendment relating to the Comprehensive Oil Pollution Liability Trust Fund).

account could not have exceeded \$850 million plus interest, recoveries, and fines, and was required to be funded out of amounts appropriated from general revenue. No more than \$850 million of such appropriations could have been placed in the account through fiscal year 1990. This account was also to have authority to borrow limited amounts from the primary Superfund. No revenues from the petroleum or feedstock taxes were to be placed in this account other than through this borrowing authority. Additionally, no Superfund amounts, other than amounts in the special account, could have been expended for the purpose of responding to such releases of petroleum or petroleum products to which the Superfund's authority applied as a result of the petroleum-related amendments of Title I of the bill, unless such response also qualified for Superfund expenditures under other provisions of CERCLA.

H.R. 5640 would have continued 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 were required to be repaid before September 30, 1990. The bill also would have transferred the trust fund provisions to the Internal Revenue Code.

These amendments would have been effective on January 1, 1985.

B. Tax Provisions

1. Excise tax on petroleum

H.R. 5640 would have increased the present law environmental excise tax on petroleum from 0.79 cent per barrel tax to 7.86 cents per barrel, effective January 1, 1985. This tax was to apply through September 30, 1990. Thus, the bill would have repealed the termination provisions of present law (sec. 4611(d)), which terminate the tax if the unobligated balance in the Superfund exceeds specified amounts, and section 303 of CERCLA, which provides for termination of the environmental excise taxes when aggregate tax collections exceed \$1.38 billion.

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

2. Excise tax on chemical feedstocks

Tax rates

H.R. 5640 would have extended and expanded the present law environmental excise tax on chemical feedstocks. In particular, the bill provided that specified organic and inorganic substances sold by the manufacturer, producer, or importer were to be taxed in accordance with the following table (Table 8):

Table 8.—Comparison of Tax Rates on Feedstock Chemicals Under Present Law and H.R. 5640

[Dollars per ton before any adjustment for inflation]

Chemical	Present law	H.R. 5640			
		1985	1986	1987	1988 and thereafter
<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
Napthalene	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	17.46	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
Cupric 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
Managanese	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 8.—Comparison of Tax Rates on Feedstock Chemicals Under Present Law and H.R. 5640—Continued

[Dollars per ton before any adjustment for inflation]

Chemical	Present law	H.R. 5640			
		1985	1986	1987	1988 and thereafter
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 hydroxide.....	.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.

Beginning in 1986, the rates specified in the table were to be adjusted for inflation. In the case of organic substances, the inflation adjustment for any year was 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, exceeded 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 was to be the percentage by which the average producer price index for basic inorganic chemicals for the 12-month period ending in the preceding September exceeded the comparable average for the 12 months ending in September 1984. Tax rates would not have been reduced below the levels shown in Table 8 even if the producer price index declined.

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 were substances that (1) have been found at waste sites, (2) are feedstocks used in producing substances found at those sites, or (3) are used in manufacturing processes that generate hazardous wastes.

For purposes of the feedstocks tax, H.R. 5640 specified that xylene was to include separated isomers of xylene only in the case of imported or exported xylene. The bill further would have repealed the present law tax on xylene for periods before January 1, 1985. Manufacturers, producers and importers of xylene who paid the tax under prior law would have been 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 Table 8 incorporated an increase over the rates that would otherwise apply, in order to recapture the tax liability that had been expected under prior law for periods before 1985.

Exemptions

H.R. 5640 would have repealed the present law exemption for coal-derived substances.

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

The bill would have retained the present law exemptions for petrochemical feedstocks 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 would have been made to the fertilizer exemption to reflect the addition of phosphoric acid to the list of taxable substances.

The bill also provided that the environmental excise tax on feedstocks was not to apply to feedstocks that are exported from the United States. In particular, the bill would have exempted from tax any taxable substance that is sold by the manufacturer or producer for export, or for resale to a second purchaser for export. If the purchaser cannot certify that a substance will be exported, or if a tax has otherwise been paid on the exported substance, the exporter could have claimed a refund or credit for the amount of the tax previously paid.

Generally these amendments to the environmental excise tax on chemicals would have taken effect on January 1, 1985.¹⁷

Alternative tax rates if tax on hazardous waste not enacted

Under the House bill, if a tax on hazardous waste was not enacted by July 1, 1986, increased tax rates on petroleum and chemical feedstocks would have taken effect on January 1, 1987. In this event, the petroleum tax would have increased to 9.65 cents per barrel and the tax on feedstocks would have increased to the rates per ton indicated in the following table (Table 9):

¹⁷ Under a transitional rule, the rates specified in present law for organic substances would have continued 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; if 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 have been available only with respect to production from facilities which the company or subsidiary owned on August 1, 1984. This transitional rule also applied to organic substances produced by subsidiaries owned by such a company on August 1, 1984.

**Table 9.—Chemical Feedstock Tax Rates Under H.R. 5640 if a
Waste Disposal Tax Was Not Adopted**

[Dollars per ton before any adjustment for inflation]

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 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
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
Postassium dichromate.....	30.06	35.00	35.00
Postassium hydroxide.....	19.66	22.94	26.21
Selenium.....	35.00	35.00	35.00

Table 9.—Chemical Feedstock Tax Rates Under H.R. 5640 if a Waste Disposal Tax Was Not Adopted—Continued

[Dollars per ton before any adjustment for inflation]

Chemical	1987	1988-89	1990
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	33.28
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 generally were 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 1989 and 4 percent in 1990, and (2) a cap equal to \$35 per ton. These rates were 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 was not enacted was intended to compensate for the \$1.2 billion in revenue which the Committee anticipated would be raised, prior to September 30, 1990, by a tax on hazardous waste. Implementation of the alternative tax rates described above would not have affected the exceptions to, or termination date of, the petroleum or feedstock taxes.

3. Study of tax on imported chemical derivatives

H.R. 5640 also would have directed 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 was to examine the probable economic effects of the increased feedstock tax on U.S. manufacturers of substances derived from taxed feedstocks. The study was also to address the legality of taxing imported derivatives under the General Agreement on Tariffs and Trade (GATT). Finally, the study was 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 hazardous waste

The bill would have required 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 hazardous wastes. These proposals were to be presented in legislative form,

and were to be designed to discourage the disposal of hazardous wastes in environmentally unsound ways.

C. Repeal of Post-closure Tax and Trust Fund

H.R. 5640 would have repealed the tax on hazardous wastes under section 4681 of the Code, effective on October 1, 1983, and terminated the Post-closure Liability Trust Fund as of that date. Refunds (with interest) were to be made to taxpayers who paid taxes on hazardous wastes under section 4681.

D. Non-Tax Provisions Affecting the Hazardous Substance Superfund

Overview

As discussed above, H.R. 5640 would have extended the funding of the Superfund for five years at significantly increased levels. This increase in funding was required primarily by an increase in the number of abandoned hazardous waste sites to be cleaned up under the Superfund program. The non-tax provisions of H.R. 5640 that would have affected 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, H.R. 5640 would have directed the EPA to place no fewer than 1,600 sites on the National Priorities List by January 1, 1988. (The EPA estimated that the Fund provided under present law was adequate to cleanup at most 170 sites.) The bill further would have required 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 would have required 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 have permitted 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 have clarified that nothing in CERCLA is to be interpreted to preempt the authority of the States to impose taxes to support State Superfund programs. The bill further would have specified that the 90/10 Federal/State matching share formula was to apply to long-term operation and maintenance costs.

Amendments to response and liability provisions

H.R. 5640 would have clarified that liability for abatement orders and cleanup costs under Sections 106 and 107 of CERCLA was to be strict, joint and several. Under this rule, each defendant generally would have been liable for the full amount of any combined damages unless the defendant could establish, by a preponderance of the evidence, that the harm caused by a release or threatened release was divisible, (in which case the defendant would have been liable for only his portion of such harm). In addition to these changes, the bill would have clarified the EPA's authority to recov-

er prejudgment interest in cost recovery actions, provided and that EPA response actions may be reviewed only in the context of cost recovery enforcement actions or civil actions under section 106, and would have made certain other adjustments and clarifications to the CERCLA response and liability provisions. Amounts recovered under these provisions would have been added to the Hazardous Substance Superfund.

Finally, H.R. 5640 would have established requirements concerning the cleanup of abandoned hazardous waste facilities owned or operated by the Federal Government. The bill would have required 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 had the ultimate responsibility for ensuring that the bill's requirements were met and was to be empowered to bring legal action against an agency or department that failed to comply with the law.

Citizens' suits

H.R. 5640 would have allowed any person who has an interest adversely affected to bring a suit against the administrator of the EPA, alleging failure to perform any act or duty under CERCLA (as amended by the bill) that is not discretionary with the Administrator. The court would have jurisdiction to order the EPA Administrator to perform such act or duty.

The bill also would have allowed affected persons to sue parties responsible for creating a waste site to compel such parties to clean up the site if it posed an imminent and substantial endangerment to human health.

The bill provided that citizens' suits (other than suits against the EPA Administrator) could 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 have intervened in any citizens' suit as a matter of right.

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

In addition to allowing citizens' suits, H.R. 5640 would have encouraged citizen participation by establishing a mandatory program for public participation in remedial decisions by EPA and by 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

H.R. 5640 would have added two basic provisions pertaining to relief of injured individuals. First, the bill would have required the Agency for Toxic Substances and Disease Registry, created under 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. These profiles, which were to be based primari-

ly on a compilation of existing literature and limited testing where necessary, would have been required to be prepared at the rate of 25 per year. Monies for these studies would have come from the Superfund.

Second, the bill would have provided 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 were released from dump sites or in the course of a disaster-like chemical fire in response to which EPA had taken a removal action. If the petitioners were able to demonstrate (e.g., through submission of laboratory tests of drinking water) that they were being exposed to a hazardous substance, the Administrator would have been required to determine whether such substances could pose a significant risk to their health and whether it is reasonably likely that such substances come from a covered facility. If the Administrator made such determinations, the bill would have required 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 showed that an exposure to hazardous substances actually does pose a significant risk, EPA would have been required immediately to reduce such exposure to safe levels. Actions by the Administrator would have included providing alternative drinking water or, in the most egregious cases, emergency relocation.

Leaking underground storage tanks

H.R. 5640 included extensive provisions regarding the regulation of leaking underground storage tanks. Under the bill, EPA would have been required to develop a regulatory program containing such requirements as may be necessary to protect human health and the environment in the case of leaking tanks. Such regulations could have included, but need not have been 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 have been made available to clean up leaks from underground storage tanks, including those tanks which store petroleum or petroleum products.

E. Comprehensive Oil Pollution Liability Trust Fund

Under an amendment offered by Rep. Breaux, and adopted on the floor of the House, H.R. 5640 would have established a separate \$200 million fund, the Comprehensive Oil Pollution Liability Trust Fund, to provide a system of liability and compensation for oil spill damage and removal costs and related purposes. This Trust Fund was to be a separate entity and was to be funded primarily by a 1.3 cents per barrel tax on oil (including crude oil or any fraction or residue therefrom) which was (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. (This fee was to be separate from, or to be additional to, any tax imposed on the crude oil under section 4611 or the Code.) Only one fee was to be imposed

with respect to any particular oil. The fee was to remain in effect at any time when the amount in the Trust Fund was less than \$200 million. Additionally, if the Trust Fund exceeded \$300 million, income from securities held by the Trust Fund was to be rebated to owners of oil who contributed fees to the Trust Fund (on a pro rata basis).

The Secretary of Transportation was to promulgate regulations establishing procedures for collection of the 1.3 cents per barrel fee. The Secretary of Transportation also would also have been responsible for designating spills eligible for payment of damage claims under the fund and for administering the trust fund, which would have been established as a nonprofit corporate entity. Persons failing to pay the fee were to be liable for civil penalties not exceeding \$10,000.¹⁸

Amounts in the oil spill liability trust fund were 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 was not to exceed \$100 million for any single incident. In addition, no claim (other than a claim for removal costs) could have been paid to the extent that such payment would reduce the amount in the fund below \$30 million; however, the fund was entitled to borrow money necessary to pay a claim.

Damages for economic loss (item (3) above) which could have been claimed under the bill included: 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 case of seasonal activities, 25 percent of seasonal earnings) were derived from the affected activities. A claimant would generally have had the option of recovering damages or removal costs (item (1) above) either from the responsible party or from the trust fund, which could then recover from the responsible party. Liability of responsible parties was 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 was not at fault under the

¹⁸ In addition to the fee, there were 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 authorized the appropriation of necessary amounts to cover administrative expenses until other revenue sources were sufficient for this purpose.

bill, liability was to be limited to specified amounts. For vessels carrying oil in bulk, other than inland barges, this limit was 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 could have proceeded with a cleanup and subsequently asserted claims against the fund, if the costs incurred exceeded the maximum liability of the responsible party, or if the party had a defense against liability under the bill. Additionally, to encourage maximum participation in cleanups, foreign claimants could have asserted claims for cleanup costs under specified circumstances.

Potentially responsible parties under the bill included oil-carrying vessels and offshore oil facilities (but not land facilities). The bill required 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 could have been brought in the United States District Court for the district in which the injury occurred or in which the defendant was found. Where appropriate, responsible parties could be joined in such proceedings. The statute of limitations for damage claims generally would have been 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 was intended to provide an exclusive judicial remedy for the removal cost and other damage claims specified in the bill; hence, actions for such damages could be brought only as provided under the bill.

The bill would have prohibited States from imposing fees to fund oil spill compensation funds which duplicated the purposes of the bill. States having such funds in existence could have continued to require contributions for three years following the effective date of the bill. States would not have been 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 was to be administered by a nine-member Board of Directors under regulations prescribed by the Secretary of Transportation. These were to include three representatives of parties liable for the 1.3 cents 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 was to submit an audit to Congress on an annual basis. The bill specified that, except as expressly provided in the bill, the fund was not to be deemed an agency or instrumentality of the United States.

These provisions would generally have been effective 180 days following the date of enactment of the bill. There was no expiration date for the trust fund; however, the bill stated that, if certain international conventions regarding oil pollution damage and compensation came 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 have continued to be compensable as provided under the bill.

VI. OTHER HOUSE BILLS RELATING TO FINANCING OF SUPERFUND

A. H.R. 1775 (Rep. Moore)—“Superfund Revenue Reauthorization Act of 1985”

Overview

H.R. 1775 is intended to provide \$5.3 billion to the Superfund (\$3.0 billion in tax revenues, \$1.5 billion in general revenues, and \$0.8 billion in interest and recoveries) over a 5-year period. Tax revenue sources are: (1) a reduced petroleum tax, imposed at a rate of 0.17 cent per barrel; (2) a tax on the same feedstock chemicals as were included under H.R. 5640 as passed by the House in 1984, but at different tax rates (including an export exemption); (3) a tax on imported derivatives of taxable feedstocks; and (4) a tax on hazardous waste. The bill includes trust fund provisions that are similar to H.R. 5640, but does not include a special fund for leaking underground storage tanks and other petroleum-related releases.

Petroleum tax

The bill would reduce the petroleum tax to 0.17 cent per barrel (the present law rate is 0.79 cent per barrel), effective October 1, 1985. This tax would generally expire on September 30, 1990.

A special rule would provide for suspension of this tax during calendar year 1989, if (1) the unobligated Superfund balance exceeds \$1.5 billion, and (2) the Treasury, after consulting with EPA, determines that this balance will exceed \$1.5 billion on September 30, 1989 if no Superfund taxes (other than the tax on hazardous wastes) are imposed during the intervening year. A similar rule would provide for suspension of the tax during calendar year 1990 if the unobligated balance exceeded \$1.5 billion on September 30, 1989, and would continue to exceed this amount on the following September 30 even if no further taxes (other than the tax on hazardous waste) were imposed.

Tax on chemical feedstocks

Tax rates

The tax on chemical feedstocks (sec. 4661) would be applied to an expanded list of taxable substances, as described in the following table (Table 10):

Table 10.—Comparison of Tax Rates on Chemical Feedstocks
Under Present Law and H.R. 1775

[Dollars per ton, before any inflation adjustment]

Chemical	Present law	H.R. 1775
<i>Organic substances:</i>		
Acetylene	4.87	2.56
Benzene	4.87	2.56
Butadiene.....	4.87	2.56
Butane.....	4.87	2.56
Butylene.....	4.87	2.56
Coal-derived light oils.....	0	2.56
Coal tars.....	0	1.47
Ethylene.....	4.87	2.56
Methane.....	3.44	1.65
Napthalene.....	4.87	2.56
Propylene.....	4.87	2.56
Toluene.....	4.87	2.56
Xylene.....	4.87	2.56
<i>Inorganic substances:</i>		
Aluminum sulfate.....	0	2.91
Aluminum phosphide.....	0	16.00
Ammonia.....	2.64	2.18
Antimony.....	4.45	16.00
Antimony trioxide.....	3.75	16.00
Arsenic.....	4.45	16.00
Arsenic trioxide.....	3.41	10.71
Asbestos.....	0	4.76
Barium sulfide.....	2.30	5.89
Bromine.....	4.45	8.03
Cadmium.....	4.45	16.00
Chlorine.....	2.70	2.52
Chromite.....	1.52	0.70
Chromium.....	4.45	16.00
Cobalt.....	4.45	16.00
Copper.....	0	16.00
Cupric oxide.....	3.59	16.00
Cupric sulfate.....	1.87	16.00
Cuprous oxide.....	3.97	16.00
Hydrochloric acid.....	.29	0.78
Hydrogen fluoride.....	4.23	16.00
Lead.....	0	6.83
Lithium carbonate.....	0	16.00
Manganese.....	0	16.00
Mercury.....	4.45	16.00
Nickel.....	4.45	16.00
Nitric acid.....	.24	2.52
Phosphoric acid.....	0	6.32
Phosphorous.....	4.45	16.00
Potassium dichromate.....	1.69	12.41
Potassium hydroxide.....	.22	8.12

**Table 10.—Comparison of Tax Rates on Chemical Feedstocks
Under Present Law and H.R. 1775—Continued**

[Dollars per ton, before any inflation adjustment]

Chemical	Present law	H.R. 1775
Selenium	0	16.00
Sodium dichromate	1.87	15.26
Sodium hydroxide.....	.28	2.33
Stannic chloride.....	2.12	16.00
Stannous chloride.....	2.85	16.00
Sulfuric acid .....	.26	0.64
Uranium oxide	0	16.00
Vanadium	0	16.00
Zinc	0	11.25
Zinc chloride.....	2.22	8.71
Zinc oxide.....	0	11.91
Zinc sulfate	1.90	6.85

Beginning in calendar year 1987, the tax rates specified in Table 10 would be adjusted for inflation. In the case of organic substances, the inflation adjustment for any year would 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 1985. In the case of inorganic substances, the inflation adjustment for any year would be the percentage by 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 1985. Tax rates would not be reduced below the levels shown in Table 10, even if the producer price index declines.

The rates provided for in the bill generally were designed to allocate 3 percent of the tax burden to crude oil and imported petroleum products, 59 percent to organic feedstocks, and 38 percent to inorganic feedstocks, with a maximum rate of \$16 per ton (before any inflation adjustment) applying to any substance. (The comparable present law percentages are 15 percent, 65 percent, and 20 percent, respectively.) The percentages under the bill are intended to reflect the relative contributions of each category of feedstocks to wastes found by EPA to be present at Superfund sites, under studies conducted pursuant to section 301 of CERCLA.

For purposes of the feedstocks tax, xylene would include separated isomers of xylene only in the case of imported or exported xylene. The bill further would repeal 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 would be permitted to obtain a refund of those taxes together with interest. To offset the resulting loss to the Superfund, the tax rate on xylene under the bill incorporates an increase over the rates

that would otherwise apply, in order to recapture the tax liability that had been expected under present law for periods before 1985.

Exemptions

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

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

The bill would retain the present law exemptions for petrochemical feedstocks 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 would be made to the fertilizer exemption to reflect the addition of phosphoric acid to the list of taxable substances.

The bill also would provide that the environmental excise tax on chemical feedstocks is not to apply to feedstocks that are exported from the United States. If a tax has otherwise been paid on an exported substance, the exporter may claim a refund or credit for the amount of the tax previously paid.

Effective date

These amendments to the environmental excise tax on chemicals would take effect on October 1, 1985.

Termination date

The feedstocks tax would generally terminate after September 30, 1990, with provisions for earlier suspension or termination (as discussed above under the petroleum tax).

Tax on imported chemical derivatives

The bill would impose a new tax on imported substances that are directly and substantially manufactured or produced from raw materials consisting of one or more taxable feedstocks under Code section 4662 (as amended by the bill). The Treasury Department would be directed to issue regulations establishing guidelines (based on the percentage of the production or raw materials cost attributable to taxable feedstocks) for determining whether any specific substance is subject to this tax. The bill specifies that, in the case of nonferrous metals, taxable substances would include (1) any fabricated (or semi-fabricated) product that has customarily been considered by agencies of the Federal Government in calculating annual production, consumption, and import statistics for the metal, (2) any alloy or compound containing at least 5 percent of the metal by weight, and (3) any lead acid battery; however, the Treasury Department would be permitted to establish de minimis levels for exempting the nonferrous metal content of any such product or alloy from the tax.

The amount of tax imposed on any taxable imported substance would be equal to the amount of tax which would have been imposed (under section 4662) on the taxable feedstocks used to manu-

facture or produce the substance, if these feedstocks had been sold in the United States for an equivalent use. If the importer does not furnish sufficient information (as established by Treasury regulations) to determine the amount of tax under this method, the tax would be imposed at a rate of 5 percent of the appraised value of the imported substance at the time of import.

The tax would be imposed on the sale of taxable substances by the importer thereof. Importers subject to tax would include any person entering a taxable substance into the United States for consumption, use, or warehousing. (The term "United States" would be defined as it is for purposes of the feedstocks tax). If an importer uses a taxable substance, tax would be imposed on the importer as if he had sold the substance. Revenues from the tax would not be paid to Puerto Rico and the Virgin Islands under the cover over provisions of section 7652 of the Code.

The tax on imported chemical derivatives would be effective on October 1, 1986 (i.e., one year after the beginning of the reauthorization period).

Tax on disposal of hazardous waste

In general.—Under the bill, a tax would be imposed on (1) the receipt of hazardous waste at a qualified hazardous waste management unit, and (2) the receipt of hazardous waste for the purpose of ocean disposal. The term "hazardous waste" would mean any waste listed or identified under section 3001 of the Solid Waste Disposal Act (SWDA), as amended. The Treasury, in consultation with EPA, would prescribe rules relating to the imposition of tax, if any, on wastes listed under the SWDA after the date of enactment.

For purposes of the tax, a qualified hazardous waste management unit is defined as (1) the smallest area of land on or in which hazardous waste is placed or (2) a structure on or in which hazardous waste is placed, provided that such area or structure isolates hazardous waste within a qualified hazardous waste management facility and is required to obtain interim status or a final permit under Subtitle C of the SWDA. A qualified waste management facility is defined as any facility (under Subtitle C of the SWDA) that has received a permit or has been accorded interim status under section 3005 of the SWDA (or an equivalent State program authorized under section 3006 of that Act). This distinction between units and facilities means that tax would not necessarily be imposed at a qualified facility until hazardous waste is received at a specific unit that isolates hazardous wastes within the overall facility. The term "ocean disposal" would be defined as the incineration or dumping of hazardous waste over or into ocean waters or certain waters described in the Marine Protection Research and Sanctuaries Act of 1972.

Backup tax on generator.—If no tax has been imposed, under the provisions above, within 270 days after hazardous waste is generated, a tax would be imposed on such waste. This tax would be imposed at the highest hazardous waste tax rate (discussed below) applicable to the last day of the 270-day period, and would be paid by the generator of the hazardous waste, defined as the person whose act or process produces the hazardous waste. The backup tax would not apply to treated waste (as defined by the bill) or to generators

of 100 kilograms or less of hazardous waste during the month in question (small quantity generators). Additionally, a partial credit (or refund) would be allowed against the backup tax for exported hazardous waste, equal to the difference between the tax imposed (i.e., the highest applicable rate) and the tax that would have been imposed at the lowest then applicable tax rate.¹⁹

Tax rates

Statutory rates.—The tax on hazardous waste would be imposed at two distinct rates, depending on the treatment or disposal method employed for the hazardous waste.

For hazardous waste received in a landfill, surface impoundment, waste pile, or land treatment unit²⁰ (that meets the definition of a qualified hazardous management unit), the tax would be imposed at a rate of \$9.80 per ton for fiscal year 1986. This rate would be increased in each succeeding fiscal year, reaching a maximum rate of \$16.32 for fiscal year 1990 as well as any 1991 extension period (discussed below).

For hazardous waste received for transport from the United States for purposes of ocean disposal, or received at a qualified hazardous waste management unit other than a landfill, surface impoundment, waste pile, or land treatment unit, the tax rate would be \$2.45 per ton for fiscal year 1986, increasing to \$4.08 per ton in fiscal 1990 (and any 1991 extension period).

As indicated above, the backup tax would be imposed at the highest then applicable tax rate (e.g., \$9.80 per ton in fiscal year 1986).

Rate adjustments.—In addition to the phase-up of rates described above, the bill calls for adjustments in the hazardous waste tax rates, beginning in fiscal year 1988, to cover shortfalls of Superfund revenues from all revenue sources. These adjustments would be made according to a formula that generally increases the hazardous waste tax rates to cover overall revenue shortfalls for the year that is two years earlier than the year in question (i.e., 1988 tax rates would compensate for 1986 shortfalls, and so on). The adjustment of tax rates would require a determination by the Treasury Secretary, by the previous July 1, that there will be a cumulative shortfall for the fiscal year in question; however, the actual rate adjustment would be made according to the statutory formula. These adjustments are intended to ensure a level of cumulative revenues consistent with the projections contained in Table 7.²¹

As a final measure to achieve revenue targets, the bill allows for a 6-month extension of the tax, through April 1, 1991, if aggregate receipts for the reauthorization are less than \$5.2 billion. The tax rates for this period would be adjusted to compensate for net 1989 and 1990 revenue shortfalls.

¹⁹ For example, in fiscal year 1986, the credit (or refund) would equal \$7.35 per ton (i.e., \$9.80 per ton minus \$2.45 per ton. See discussion of tax rates below.

²⁰ These terms would be defined as under EPA regulations issued pursuant to sections 3004 and 3005 of the SWDA.

²¹ These are identical to the Administration's revenue targets, as included in H.R. 1342.

Exemptions

Treatment of hazardous waste.—Under Treasury regulations, an exemption from tax (or a credit for tax paid) would be allowed for the qualified treatment of hazardous waste. (This exemption would apply both to the waste disposal and backup taxes.) Qualified treatment would include any treatment performed at a qualified hazardous waste management unit and employing a method, technique, or process that (1) meets detailed performance standards established by the EPA, and (2) has a destruction efficiency at least equivalent to the destruction efficiency applicable to incineration. Qualified treatment also would include surface impoundments that: (1) contain treated waste water during the secondary or tertiary phase of biological treatment subject to a permit issued under section 402 of the Clean Water Act (or which hold such treated waste water after treatment and prior to discharge); and (2) are in compliance with generally applicable ground water monitoring requirements of the SWDA.

The treatment exemption would generally take the form of a credit (or refund) for tax paid when hazardous waste was originally received at the qualified management unit. This credit (or refund) would be allowed in the same manner as an overpayment of tax. If the qualified treatment is completed before the time for payment of tax, no tax would be imposed.

If any residue from a qualified treatment itself constitutes a hazardous waste, such residue would be subject to tax as if it were originally generated in the treatment process.

CERCLA responses.—An exclusion from the hazardous waste disposal tax would be provided for the receipt of any hazardous waste pursuant to a removal or remedial action under CERCLA, where (1) the response action has been selected or approved by EPA, and (2) the release, or threatened release, of the substances that caused the response action occurred before October 1, 1985.

Procedure and administration

Imposition of tax.—The waste disposal tax would generally be imposed on the owner or operator of a qualified hazardous waste management unit. In the case of ocean disposal, tax would be imposed on the owner or operator of the vessel or aircraft that disposes of hazardous waste in or over the ocean. The backup tax would be imposed on the generator of hazardous waste (as described above).

Credit for tax paid.—The proposal includes a mechanism for credits or refunds where tax is paid with respect to hazardous waste and the waste is subsequently received at another qualified management unit or received for transport for ocean disposal, or exported from the United States (i.e., where a second taxable event takes place). (This mechanism also would apply to prevent double taxation from occurring as a result of the imposition of the backup tax.) The amount of any allowable credit is limited to the product of (1) the lesser of (a) the quantity of hazardous waste transferred, or (b) the quantity of hazardous waste on which the tax was previously paid, multiplied by (2) the lesser of (a) the rate of tax payable by the party receiving the hazardous waste, or (b) the rate of tax

previously paid on the waste. These limitations prevent a refund for an amount greater than the tax originally paid. Credits or refunds would be made, without interest, to the person who paid the original tax, following the same procedures as would be used for overpayments of tax.

Information reporting.—Persons subject to the tax on hazardous waste would be required to submit to the Treasury such information as may be required in regulations, including (but not limited to) information that is required to be provided to EPA under the Solid Waste Disposal Act. A penalty of \$25 per day (but not to exceed \$25,000) would be imposed for failure to provide such information, unless it is shown that such failure is due to reasonable cause and not due to willful neglect. The proposal specifies that this is in addition to any other penalty provided by law.

No cover over of tax revenues.—The bill specifies that revenues from the tax on hazardous waste would not be paid to Puerto Rico or the Virgin Islands under the provisions of section 7652 of the Code.

Effective date

The tax on hazardous waste would be effective on October 1, 1985.

Termination date

The tax would expire after September 30, 1990, unless the Treasury determines that total Superfund receipts for the period October 1, 1985 through September 30, 1990 are less than \$5.2 billion. In that case, the tax would terminate on March 31, 1991.

Repeal of post-closure liability tax and trust fund

The Post-closure Liability Trust Fund and the associated waste disposal tax (Code secs. 4681 and 4682) under present law would be repealed by the bill, effective October 1, 1983 (i.e., the original effective date of the tax).

Trust fund provisions

The bill contains trust fund provisions that generally are similar to those contained in H.R. 5640 as passed by the House in 1984 (discussed above), except that the bill does not include the provisions of H.R. 5640 that related to the special account for leaking underground storage tanks. The bill would: (1) officially rename the Fund "The Hazardous Substance Superfund" and place the Fund under the trust fund provisions of the Internal Revenue Code; (2) add hazardous waste tax revenues (together with revenues from the tax on imported chemical derivatives) as a financing source; and (3) delete natural resource damage claims as a permitted use of Fund proceeds. H.R. 1775 also would authorize general revenue appropriations to the Superfund of \$294 million per year for fiscal years 1986 through 1990 (an aggregate of \$1.47 billion), in addition to any previously authorized but unappropriated amounts.

The trust fund provisions of the bill would be effective on October 1, 1985.

B. H.R. 2018 (Reps. Schneider, Wyden, and others)—“Hazardous Waste Reduction Act of 1985”

Overview

H.R. 2018 would impose a tax on all forms of land and ocean disposal of hazardous wastes that are regulated by the Resource Conservation and Recovery Act (“RCRA”). The tax would be imposed at a rate of \$20 per ton on disposal methods other than injection wells. Injection wells would be taxed at a \$5 per ton rate. Hazardous waste rendered nonhazardous within one year of receipt at a treatment, storage, or disposal facility would receive a full credit for the tax paid on such waste. The tax is intended to raise \$286 million per year, as part of a comprehensive Superfund financing package. The tax is intended to create economic incentives for the treatment, as opposed to land disposal, of hazardous waste.

Imposition of tax

The bill would impose tax on (1) the receipt of taxable hazardous waste in any qualified hazardous waste management unit, (2) the receipt of taxable hazardous waste for export or for ocean disposal (pursuant to a permit under section 102 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1412)), and (3) the placement of any hazardous wastes in any other facility or location. Taxable hazardous waste would mean hazardous waste (including “toxic” and “characteristic” waste) that is identified or listed under section 3001 of the Solid Waste Disposal Act (“SWDA”) as of the date of enactment of the bill, and is not thereafter delisted. The term “hazardous waste” would have the same meaning provided by section 1004 of the SWDA and the regulations thereunder. Thus, substances (including household wastes) that are not treated as hazardous wastes under section 1004 would not be subject to tax. If EPA lists or identifies additional hazardous wastes under section 3001 of the SWDA after January 1, 1985, then EPA would be required simultaneously to transmit to Congress recommendations concerning the taxation of such waste.²²

A qualified hazardous waste management unit is defined as (1) the structure in or on which hazardous waste is placed, which structure isolates the hazardous waste within a qualifying treatment, storage, or disposal facility, or (2) if the waste is not placed in or on a structure, the smallest area of land in or on which hazardous waste is placed. Qualifying facilities are defined as those operating pursuant to a final or interim status permit under sec. 3005 of the SWDA, or under an equivalent State program authorized by sec. 3006 of the SWDA.

The tax would not apply to placement of hazardous waste on the premises of the person generating the waste, if the wastes are held for a period shorter than that which would require the generator to obtain a permit under the SWDA (generally 90 days). Further, this tax would not apply to a generator of less than 100 kilograms of hazardous waste in any calendar month (small quantity generator). In addition, the tax would not apply to facilities or locations

²² The bill further specifies that, in the case of solid wastes required to be studied under section 8002(f) or (p) of the SWDA, no tax could be imposed unless provided by legislation.

(including wastewater storage or treatment tanks) that are exempt from the permit, interim status, and manifest requirements under subtitle C of the SWDA, as in effect on the date of enactment of the bill.

Tax rates

General rate.—The tax would be imposed at a rate of \$20 per ton for taxable hazardous waste disposed of by any method other than underground injection. This rate would apply to all other forms of land disposal or storage (including landfills, surface impoundments, waste piles, and land treatment), as well as to treatment facilities that do not render waste nonhazardous within one year of receipt. The \$20 per ton rate would also apply to export or ocean disposal and to the placement of hazardous waste at non-RCRA facilities, including hazardous waste treated or disposed of in violation of RCRA permits.

Special rate for underground injection.—A \$5 per ton tax rate would apply to hazardous waste injected into an underground well that is operating pursuant to a permit (or interim status) under the SWDA, and for which a permit is also in effect under part C of the Safe Drinking Water Act. The term “underground injection well” has the same meaning as in the Safe Drinking Water Act and the regulations promulgated thereunder.

Adjustment of tax rates.—The bill directs the Treasury Department to adjust tax rates, beginning in 1986, if necessary, to ensure the receipt of anticipated revenues. Under this provision, before October 1 of 1986 and each subsequent year of the reauthorization period, the Treasury would be required to estimate the actual amount of revenues to be derived from the tax during the fiscal year beginning that October 1. (These estimates could be based on the prior experience of the tax, together with other relevant information.) If the estimated fiscal year revenues are less than \$286 million, Treasury would be required to increase the tax rates for that fiscal year by a percentage which Treasury estimates would result in \$336 million of revenues during the fiscal year. This adjustment would apply proportionately to the general \$20 tax rate and the \$5 tax rate for disposal by underground injection.²³

Exemptions from tax

As indicated above, various categories of wastes (including small generator wastes, mining wastes, temporarily stored hazardous wastes, and effluents discharged under Clean Water Act permits) would be excluded from the definition of taxable hazardous waste under the bill. The bill also provides the following exemptions from otherwise applicable tax:

Treatment or conversion of hazardous waste.—An exemption from tax (or a credit for tax paid) would be allowed for the qualified treatment or conversion of taxable hazardous waste that is completed within one year of the first taxable receipt or placement

²³ The adjustment to a \$336 million revenue level appears to be designed to compensate for earlier revenue shortfalls and to ensure that aggregate revenues are at least equal to the originally intended level.

of the waste.²⁴ Qualified treatment or conversion would include any method, technique, or process that changes taxable hazardous waste into a substance that is no longer a taxable hazardous waste. The exemption would not apply to the application of waste onto, or its incorporation into, the soil surface ("land treatment"), or to any method that violates any substantive requirement of Federal or State law relating to the management of taxable hazardous waste, including requirements relating to dust suppression and to hazardous waste used as a fuel. The exemption also would not apply to qualified waste water treatment facilities; these facilities are the subject of a separate exemption (discussed below).

Wastewater treatment facilities.—An exemption would be provided for certain wastewater treatment facilities that have a permit in effect under section 402 of the Clean Water Act, and that are required to comply with ground water monitoring requirements generally applicable to facilities permitted under section 3005(c) of the SWDA. A qualified wastewater treatment facility is defined as a surface impoundment which contains treated wastewater during the secondary or tertiary phase of biological treatment, or that holds treated wastewater between treatment and discharge. Effective November 8, 1988, this exemption would be limited to facilities that are in compliance with the minimum technological requirements of the SWDA (sec. 3004(o)(1)(A)), or that meet the SWDA requirements relating to interim status surface impoundments.

Certain Superfund responses.—No tax would be imposed on the receipt or placement of hazardous waste in the course of carrying out any removal or remedial action under CERCLA, provided that (1) the removal or remedial action is carried out in accordance with a plan approved by the EPA or the State, and (2) the release or threatened release that caused the removal or remedial action occurred before October 1, 1985.

Movement from closed interim status facilities.—No tax would be imposed on waste removed from a facility operating with interim status under the SWDA, if such removal is pursuant to an EPA order closing the facility, and the waste is subsequently received at a facility holding a permit under the SWDA (or an equivalent State program).

Procedure and administration

Liability for tax.—The tax would be paid by the owner or operator of a qualified hazardous waste management unit; by the person holding the permit for ocean disposal under section 102 of the Marine Protection, Research, and Sanctuaries Act of 1972; or, in the case of export, by the person exporting the taxable hazardous waste. In the case of other placements of taxable hazardous waste, tax would be imposed on the person placing the waste in the relevant facility or location.

Timing of payment.—The tax would be due at the close of the calendar quarter during which the waste became subject to tax.

Credits for prior payment.—Under Treasury regulations, if tax is imposed with respect to any waste, and a second tax is subsequent-

²⁴ The Treasury would promulgate rules for applying the one-year limitation to fungible hazardous waste.

ly paid upon the receipt of the waste at a qualified management unit (or paid for wastes that are exported or burned at sea), then a credit or refund would be allowed to the person who paid the first tax. The amount of this credit would be limited to the lesser of the tax imposed on the first taxable event or the tax paid by reason of the second event. Such a credit (or refund) would be treated in the same manner as an overpayment of tax; however, no interest would be paid on credited (or refunded) amounts.

If tax is first imposed upon the receipt of taxable hazardous waste at a surface impoundment, and the waste is later received at an underground injection well, a credit (or refund) would be allowed for the amount by which the tax imposed upon receipt at the surface impoundment exceeds the tax paid upon receipt at the underground injection well (i.e., \$15 per ton at the unadjusted tax rates). Thus, the net tax on waste stored for more than a year prior to underground injection would be \$10 per ton (\$20 plus \$5 minus \$15).

Credits or refunds also would be allowed where tax is paid with respect to waste later subjected to qualified treatment or conversion processes (see discussion of treatment or conversion exemption above). This credit would not be allowed to duplicate an earlier credit received under the rules described in the preceding paragraphs.

Information reporting and recordkeeping requirements.—The bill would require persons subject to tax to keep records and to comply with rules and regulations prescribed by the Treasury Department to ensure proper assessment and collection of the tax. The Treasury would be directed to consult with the EPA and the Army Corps of Engineers to ensure that records, statements, and returns for tax purposes are consistent, to the extent possible, with the reports required to be submitted to the EPA under the Solid Waste Disposal Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act of 1972. As part of this coordination, the Treasury could require any person who is required to maintain records under those Acts to submit copies of such records (or reports) or otherwise to make them available to the Treasury.

Allocation to Superfund

Revenues from the tax (technically, amounts equivalent to these revenues) would be deposited in the Superfund under the appropriate CERCLA provision.

Effective date

The tax would be effective for hazardous waste received, placed, or exported on or after January 1, 1986.

Termination date

The tax imposed by the bill would expire on September 30, 1990.

Studies

The bill would require the Secretary of the Treasury to submit to Congress, not later than April 1, 1986, a report on the implementation of the hazardous waste tax. Additionally, not later than January 1, 1987, the Secretary of the Treasury would be required to

submit to Congress recommendations (if any) for a tax on hazardous waste that would (1) raise \$286 million per year, and (2) discourage the disposal of hazardous wastes in an environmentally unsound manner (and to accomplish this with maximum administrative feasibility).

C. H.R. 2022 (Rep. Sikorski and others)—“Superfund Expansion and Protection Act of 1985”

Overview

H.R. 2022 is intended to provide \$11.7 million to the Superfund over a 5-year period, including \$10.3 billion in tax revenues from the following sources: (1) an increased petroleum tax to be imposed at a 15.8 cents per barrel rate; (2) a tax on the same chemical feedstocks at the same tax rates as under H.R. 5640 as passed by the House in 1984 (including an export exemption); and (3) a tax on the treatment, storage, disposal, or export of hazardous waste (with a complementary tax on unregulated placements of hazardous waste). The bill would further order a study of the feasibility of a tax on imported chemical derivatives to complement the feedstock tax. Total Superfund receipts also would include \$280 million per year of general revenue appropriations (an aggregate of \$1.4 billion over the 5-year reauthorization period). The trust fund provisions and Superfund expenditure purposes also would generally be similar to provisions those approved by the House in 1984.

Petroleum tax

The petroleum tax (Code sec. 4611) would be increased to 15.8 cents per barrel under the bill (the present law rate is 0.79 cent per barrel), effective October 1, 1985. The tax would expire on September 30, 1990.

Tax on chemical feedstocks

Tax rates

The tax on chemical feedstocks (sec. 4661) would be applied to an expanded list of taxable substances (the same as that included in H.R. 5640 as passed by the House in 1984). The tax rates are also the same as those included in H.R. 5640 (assuming a waste and tax was not enacted). The taxable substances and applicable tax rates are illustrated in the following table (Table 11):

Table 11.—Comparison of Tax Rates on Chemical Feedstocks Under Present Law and H.R. 2022

[Dollars per ton before any adjustment for inflation]

Chemical	Present law	H.R. 2022			
		1985 and 1986	1987	1988 and 1989	1990
<i>Organic substances:</i>					
Acetylene	4.87	30.00	35.00	35.00	35.00

Table 11.—Comparison of Tax Rates on Chemical Feedstocks
Under Present Law and H.R. 2022—Continued

[Dollars per ton before any adjustment for inflation]

Chemical	Present law	H.R. 2022			
		1985 and 1986	1987	1988 and 1989	1990
Benzene	4.87	8.80	13.20	15.40	17.60
Butadiene	4.87	13.05	19.58	22.84	26.11
Butane	4.87	5.60	8.40	9.80	11.20
Butylene	4.87	6.87	10.30	12.02	13.73
Coal-derived light oils	0	6.69	10.04	11.71	13.39
Coal tars	0	2.37	3.56	4.15	4.75
Ethylene	4.87	9.19	13.78	16.08	18.37
Methane	3.44	3.44	4.00	4.67	5.33
Napthalene	4.87	9.19	13.78	16.08	18.37
Propylene	4.87	7.83	11.74	13.70	15.65
Toluene	4.87	6.92	10.38	12.11	13.84
Xylene	4.87	14.05	21.30	21.77	20.53
<i>Inorganic substances:</i>					
Aluminum sulfate	0	4.69	7.04	8.40	9.35
Aluminum phosphide	0	30.00	35.00	35.00	35.00
Ammonia	2.64	3.52	5.28	6.16	7.04
Antimony	4.45	30.00	35.00	35.00	35.00
Antimony trioxide	3.75	30.00	35.00	35.00	35.00
Arsenic	4.45	30.00	35.00	35.00	35.00
Arsenic trioxide	3.41	17.29	25.94	30.26	34.59
Asbestos	0	7.68	11.52	13.44	15.36
Barium sulfide	2.30	9.51	14.26	16.64	19.01
Bromine	4.45	12.97	19.46	22.70	25.95
Cadmium	4.45	30.00	35.00	35.00	35.00
Chlorine	2.70	4.07	6.10	7.12	8.13
Chromite	1.52	1.52	1.76	1.98	2.27
Chromium	4.45	30.00	35.00	35.00	35.00
Cobalt	4.45	30.00	35.00	35.00	35.00
Copper	0	30.00	35.00	35.00	35.00
Cupric Oxide	3.59	30.00	35.00	35.00	35.00
Cupric sulfate	1.87	30.00	35.00	35.00	35.00
Cuprous oxide	3.97	30.00	35.00	35.00	35.00
Hydrochloric acid .....	.29	1.25	1.88	2.19	2.51
Hydrogen fluoride	4.23	30.00	35.00	35.00	35.00
Lead	0	11.03	16.54	19.30	22.05
Lithium carbonate	0	30.00	35.00	35.00	35.00
Manganese	0	30.00	35.00	35.00	35.00
Mercury	4.25	30.00	35.00	35.00	35.00
Nickel	4.25	30.00	35.00	35.00	35.00
Nitric acid .....	.24	4.07	6.10	7.12	8.13
Phosphoric acid	0	10.20	15.30	17.85	20.40
Phosphorous	4.45	6.65	7.59	7.59	7.59
Potassium dichromate	1.69	20.04	30.06	35.00	35.00

**Table 11.—Comparison of Tax Rates on Chemical Feedstocks
Under Present Law and H.R. 2022—Continued**

[Dollars per ton before any adjustment for inflation]

Chemical	Present law	H.R. 2022			
		1985 and 1986	1987	1988 and 1989	1990
Potassium hydroxide.....	.22	13.11	19.66	22.94	26.21
Selenium	0	30.00	35.00	35.00	35.00
Sodium dichromate	1.87	24.64	35.00	35.00	35.00
Sodium hydroxide.....	.28	3.76	5.64	6.58	7.52
Stannic chloride.....	2.12	30.00	35.00	35.00	35.00
Stannous chloride.....	2.85	30.00	35.00	35.00	35.00
Sulfuric acid .....	.26	1.04	1.56	1.82	2.08
Uranium oxide.....	0	30.00	35.00	35.00	35.00
Vanadium	0	30.00	35.00	35.00	35.00
Zinc	0	16.64	24.96	29.12	33.28
Zinc chloride.....	2.22	14.07	21.10	24.62	28.13
Zinc oxide.....	0	19.24	28.86	33.67	35.00
Zinc sulfate	1.90	11.07	16.60	19.37	22.13

As under H.R. 5640, the rates specified in the table would be adjusted for inflation beginning in 1986. In the case of organic substances, the inflation adjustment for any year would 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 would be the percentage by which the average producer price index for basic inorganic chemicals for the 12-month period ending in the preceding September exceeds the comparable average for the 12 months ending in September 1984. Tax rates would not be reduced below the levels shown in Table 11 even if the producer price index declined.

The rates provided for in the bill were generally determined by taxing each substance at the lesser of: (1) \$30 per ton (\$35, beginning in 1987), and (2) a specified percentage of the substance's estimated 1985 selling price. The percentages used for this purpose were 2 percent in 1985 and 1986, 3 percent in 1987, 3.5 percent in 1988 and 1989, and 4 percent in 1990.

For purposes of the chemical feedstock tax, the bill specifies that xylene is to include separated isomers of xylene only in the case of imported or exported xylene. The bill further would repeal the present law tax on xylene for periods before October 1, 1985. Manufacturers, producers, and importers of xylene who paid the tax under prior law would 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 Table 12) incorporate an

increase over the rates that would otherwise apply, in order to recapture the tax liability that had been expected under prior law for periods before 1985.

Exemptions

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

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

The bill would retain the present law exemptions for petrochemical feedstocks 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 would be 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 would exempt from tax any taxable substance that is sold by the manufacturer or producer for export, or for resale to a second purchaser for export. If a tax has otherwise been paid on an exported substance, the exporter could claim a refund or credit for the amount of the tax previously paid.

These amendments to the environmental excise tax on feedstock chemicals would take effect on October 1, 1985.

Study of tax on imported chemical derivatives

In connection with extending and expanding the chemical feedstock tax, the bill would direct the Treasury Department, in consultation with the International Trade Commission, to study the trade and other economic effects of the feedstocks tax and the feasibility and desirability of imposing a tax on imported derivatives of feedstocks subject to tax. The Treasury would be required to submit a report on its study to the Committee on Ways and Means and the Senate Committee on Finance not later than April 1, 1986.

Tax on hazardous waste

Imposition of tax

Treatment, storage, disposal, or export of hazardous waste.— Under the bill, a tax would be imposed, effective October 1, 1986, on (1) the receipt of hazardous waste at a qualified hazardous waste management unit, (2) the receipt of hazardous waste for transport from the United States for the purpose of ocean disposal, and (3) the export of hazardous waste from the United States. The term “hazardous waste” would mean any waste listed or identified under section 3001 of the Solid Waste Disposal Act (“SWDA”), as amended. The Treasury, in consultation with EPA, would prescribe rules relating to the imposition of tax, if any, on wastes listed under the SWDA after the date of enactment.

For purposes of the tax, a qualified hazardous waste management unit is defined as (1) the smallest area of land on or in which hazardous waste is placed, or (2) a structure on or in which hazardous waste is placed, provided that such area or structure isolates hazardous waste within a qualified hazardous waste management facility and is required to obtain interim status or a final permit under Subtitle C of the SWDA. A qualified waste management facility is defined as any facility (as defined under Subtitle C of the SWDA) that has received a permit or has been accorded interim status under section 3005 of the SWDA (or an equivalent State program authorized under section 3006 of that Act). This distinction between units and facilities means that tax would not necessarily be imposed at a qualified facility until hazardous waste is received at a specific unit that isolates hazardous wastes within the overall facility. The term "ocean disposal" would be defined as the incineration or dumping of hazardous waste over or into ocean waters or certain waters described in the Marine Protection Research and Sanctuaries Act of 1972.

Tax on unregulated placements of hazardous waste.—If hazardous waste is disposed of or stored otherwise than by export, ocean disposal, or receipt at a qualified hazardous waste management unit (e.g., by illegal dumping of hazardous waste), a tax would be imposed on the placement of the waste in any other facility or location. This tax would be imposed at the higher of the two rates applicable under the bill (discussed below). The tax would be paid by the person placing the taxable hazardous waste in the facility or location. The tax would not apply to (1) storage by the generator of the waste for periods shorter than that which would require the generator to obtain a permit under section 3005 of the SWDA (or an equivalent authorized State program), (2) placement of taxable hazardous waste in a vehicle for transport to a facility at which the general tax will be imposed, or (3) small generators (100 kilograms or less of hazardous waste generation per month).

Tax rates

The bill would impose tax at two distinct rates depending on the method of treatment or disposal.

For hazardous waste received at a landfill, surface impoundment, waste pile, land treatment facility, or injection well,²⁵ the tax would be imposed at a rate of \$5.05 per ton for fiscal year 1987. This rate would be increased in each succeeding fiscal year, reaching a maximum rate of \$8.16 for fiscal year 1990.

For hazardous waste exported from the United States, received for transport from the United States for purposes of ocean disposal, or received at a qualified hazardous waste management unit other than a landfill, surface impoundment, waste pile, land treatment unit, or injection well, the tax rate would be \$1.34 per ton for fiscal year 1987, increasing to \$2.19 per ton in fiscal 1990.

The bill does not provide for any adjustment of tax rates to meet intended revenue targets.

²⁵ These terms would be defined as under EPA regulations issued pursuant to sections 3004 and 3005 of the SWDA.

Exemptions

Two exemptions from the hazardous waste tax would be provided under the bill. First, an exclusion would be provided for the treatment, storage, or disposal of any hazardous waste pursuant to a removal or remedial action under CERCLA, where (1) the response action is selected by EPA, and (2) the release, or threatened release, of the substances that caused the response action first occurred before October 1, 1985. Second, hazardous waste generated at a federal facility, and subsequently received at a qualified hazardous waste management unit (or exported from the United States) would be exempt from tax.

The bill does not provide an exemption for the treatment of hazardous wastes.

Procedure and administration

Imposition of tax.—Generally, the tax would be imposed on the owner or operator of a qualified hazardous waste management unit. In the case of ocean disposal, tax would be imposed on the owner or operator of the vessel or aircraft that disposes of hazardous waste in or over the ocean. In the case of export, tax would be imposed on the exporter of hazardous waste. The tax on unregulated placements would be imposed on the person placing the hazardous waste in the relevant facility or location. The tax would be payable (in all cases) on a quarterly basis.

Credit for tax paid.—The bill includes a mechanism for credits or refunds where tax is paid with respect to hazardous waste and the waste is subsequently received at another qualified unit, received for transport for ocean disposal, or exported from the United States (i.e., where a second taxable event takes place). The amount of this credit is limited to the product of (1) the lesser of (a) the quantity of hazardous waste transferred, or (b) the quantity of hazardous waste on which the tax was previously paid, multiplied by (2) the lesser of (a) the rate of tax payable by the party receiving the hazardous waste, or (b) the rate of tax previously paid on the waste. These limitations prevent a refund for an amount greater than the tax originally paid.

Credits or refunds would be made, without interest, to the person who paid the original tax, following the same procedures as would be used for overpayments of tax.

Information reporting.—Persons subject to the tax would be required to submit to the Treasury such information as may be required in regulations, including (but not limited to) information that is required to be provided to EPA under the SWDA. A penalty of \$25,000 per day would be imposed for failure to provide such information, unless it is shown that such failure is due to reasonable cause and not due to willful neglect. The bill specifies that this is in addition to any other penalty provided by law.

Effective date

The tax on hazardous waste would be effective on October 1, 1986.²⁶

²⁶ Because of a clerical error, the bill includes an effective date of October 1, 1985; however, the tax is imposed only on taxable events beginning October 1, 1986.

Termination date

The tax would expire after September 30, 1990.

Repeal of the post-closure liability tax and trust fund

The Post-closure Liability Trust Fund and the associated waste disposal tax (Code secs. 4681 and 4682) under present law would be repealed, effective October 1, 1983 (i.e., the original effective date of the tax).

Trust fund provisions

The bill contains trust fund provisions similar to H.R. 5640 as passed by the House in 1984. The bill would make Superfund moneys available to finance an expanded Superfund program, including 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. However, natural resource damage claims (section III(a)(3) of CERCLA) would be deleted as a Fund expenditure purpose. Also, as under H.R. 5640, the bill would establish a separate account for the purpose of responding to leaking underground storage tanks and other petroleum wastes that may present a significant risk to human health. This account would be funded exclusively by general revenue appropriations not exceeding \$850 million over the 5-year reauthorization period (see discussion of H.R. 5640 in Part V above).

As under H.R. 5640, the bill would officially rename the Fund as the "Hazardous Substance Superfund" and place the trust fund provisions in the Internal Revenue Code. The substance of the trust fund administrative provisions would generally be unchanged from present law.

The amended trust fund provisions would be effective on October 1, 1985.

Non-tax provisions affecting the Hazardous Substance Superfund

The expenditure provisions of the bill are generally similar to H.R. 5640 as passed by the House in 1984, except that the bill does not include the Comprehensive Oil Spill Liability Trust Fund or the regulatory program for underground storage tanks included in H.R. 5640.²⁷ A regulatory program for underground storage tanks

²⁷ The Comprehensive Oil Spill Liability Trust Fund was added by a floor amendment to H.R. 5640 in 1984, but was never enacted.

similar to that in H. R. 5640 was enacted as Title VI of the Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616 ("RCRA amendments"). These provisions, insofar as they affect the demands upon and the resources available to the Superfund, are discussed in Part V above.

In addition to the provisions of H.R. 5640, the bill (H.R. 2022) includes the following new provisions that affect the functioning of the Superfund:

(1) *Mandatory cleanup schedule and standards.*—The bill strengthens the mandatory cleanup schedule included in H.R. 5640 to require that 1,800 sites be listed on the National Priorities List by January 1, 1988, and that on-site cleanup activities begin at a rate of 200 facilities per year (beginning on October 1, 1986). The bill would further require implementation of a permanent treatment remedy at Superfund sites whenever such a remedy is technologically feasible. If the wastes at a Superfund site cannot be permanently treated, the bill allows EPA to implement an interim containment remedy, but provides that the site cannot be removed from the Superfund list until a permanent treatment remedy can be implemented.

(2) *Federal cause of action.*—The bill would create a Federal cause of action for victims of toxic waste exposure, allowing them to recover damages from responsible private parties under the same liability standards that apply in Superfund cleanup cases (i.e., strict, joint, and several liability). Compensable damages under this provision would include (1) medical expenses, (2) any loss of income or profits, or impairment of earning capacity, (3) pain and suffering, and (4) any economic loss or damage to property, including real and significant diminution in value. The Superfund would not compensate injured parties with respect to any of these damages. (This provision is similar to a provision in H.R. 5640 as originally reported by the Committee on Energy and Commerce last year).

(3) *Victims' assistance demonstration program.*—The bill would establish a 5-year demonstration program to assist victims of toxic substances. This program would cover 10 to 20 areas each year, and would be funded by a maximum of \$15 million in Federal funds each year.

(4) *Community "right to know".*—The bill would establish a national system for notifying communities of potential toxic chemical hazards to which they might be exposed, and to mandate the development of emergency response and evacuation plans on a district-by-district basis.

D. H.R. 2208 (Reps. R.M. Hall and Fields)—“Hazardous Substance Response Act of 1985”

Overview

H.R. 2208, introduced by Representatives R. M. Hall and Fields, would impose a tax on hazardous waste to raise approximately \$1.5 billion of Superfund revenues over a five-year period. The tax would be imposed at varying rates on four different categories of hazardous waste, depending on the method of disposal or storage, and would provide an exemption for hazardous waste treatment facilities. The tax imposed by the bill is intended to be an additional, rather than an exclusive, source of revenues for the Superfund.

Imposition of tax

The bill would impose a tax on (1) the receipt of hazardous waste for disposal at a qualified hazardous waste disposal facility, or (2) the long-term storage of a hazardous waste in a qualified hazardous waste storage facility. Long-term storage would be defined as storage for one year or more.²⁸

Hazardous waste subject to the tax would include any waste that is identified or listed under section 3001 of the Solid Waste Disposal Act (“SWDA”) as in effect on the date of enactment of the bill (other than waste the regulation of which has been suspended by Congress) and that is subject to recordkeeping requirements under sections 3002 and 3004 of that Act. The tax would not apply to any wastes that are exempt from regulation as a hazardous waste under section 3001 of the SWDA as of the date of enactment. If any waste is subsequently determined by EPA to pose a potential danger to human health and the environment, following studies under section 8002 of the SWDA, and if EPA promulgates regulations for the disposal of such waste, then the bill directs EPA to transmit to Congress a recommendation for imposing tax on the disposal or long-term storage of such waste. Tax would actually be imposed only when authorized by legislation.

Qualified hazardous waste storage facilities would include any storage facility, waste pile, or surface impoundment permitted or accorded interim status under section 3005 of the SWDA.²⁹ Qualified hazardous waste disposal facilities would mean any disposal facility permitted or accorded interim status under section 3005 of the SWDA, section 102 of the Marine Protection, Research and Sanctuaries Act, or part C of the Safe Drinking Water Act.

For purposes of the tax, the term disposal would mean the discharge, deposit, injection, dumping, or placing of any hazardous waste into or on any land or water so that such hazardous waste may enter the environment.

Tax would not be imposed on hazardous waste that is “treated” within one year after receipt at a hazardous waste facility. Treatment is defined as any method, technique, or process designed to change the physical, chemical, or biological character or composi-

²⁸ For purposes of this rule, in the case of fungible waste, the last waste placed in a facility would be presumed to be the first waste removed (i.e., LIFO accounting).

²⁹ The terms “waste pile” and “surface impoundment” would be defined by reference to the SWDA.

tion of any hazardous waste so as to convert it to a nonhazardous waste.³⁰

Tax also would not be imposed under the bill on hazardous waste that is reclaimed. Reclamation includes: (1) the processing of hazardous waste to recover a usable product; (2) the use of hazardous wastes as an ingredient (including an intermediate ingredient) in an industrial process; and (3) the use of hazardous wastes as an effective substitute for a commercial product. Reclamation does not include the use of hazardous wastes to produce products that are applied to the land or burned for energy recovery.

Tax would be imposed on the byproduct or residue from any treatment or reclamation method where such byproduct or residue itself constituted a hazardous waste.

Tax rates

Tax would be imposed on four categories of hazardous waste, depending upon the disposal or storage method employed:

(1) *Land disposal*.—A \$45 per ton tax rate would apply to hazardous waste disposed of in landfills, waste piles, or surface impoundments (as defined under the SWDA).

(2) *Ocean dumping or land treatment*.—A \$25 per ton tax rate would apply to hazardous waste disposed of by ocean dumping or land treatment.³¹

(3) *Underground injection*.—A \$5 per ton tax rate would apply to hazardous waste disposed of by underground injection.

(4) *Long-term storage*.—A \$45 per ton tax rate would apply to hazardous waste stored for more than one year.

As an alternative to the tax rates above, if the owner or operator of a qualified hazardous waste facility were able to establish the water content of the hazardous waste deposited for storage or disposal, the owner or operator could elect, pursuant to Treasury regulations, to pay a tax of \$50 per ton on the amount of such waste reduced by the weight of water (i.e., on a "dry weight" basis).

Exclusions from tax

The treatment or reclamation of hazardous waste (as defined under the bill) would generally not be subject to tax. The bill also would provide the following specific exclusions from otherwise applicable tax.

First, no tax would be imposed on the disposal or long-term storage of wastes in a surface impoundment that is part of a secondary or tertiary phase of a biological treatment facility subject to a permit issued under section 402 of the Clean Water Act. This exclusion would apply only if the facility is in compliance with generally applicable ground water monitoring requirements for facilities permitted under section 3005(c) of the SWDA.

Second, no tax would be imposed on the disposal or long-term storage of certain wastes associated with activities conducted under the provisions of the Comprehensive Environmental Response,

³⁰ For this purpose, air and water effluents permitted by the Federal Government or by delegated State agencies, under the Clean Air Act or the Clean Water Act, would be considered non-hazardous wastes.

³¹ Land treatment is a form of disposal regulated under RCRA. This is distinct from treatments as defined by the bill, which would be exempt from tax.

Compensation, and Liability Act ("CERCLA"). This exclusion would apply to (1) any waste disposed of in the course of carrying out a removal or remedial action under CERCLA (provided that the disposal or storage is carried out in accordance with a plan approved by EPA or a State), (2) any waste removed from a facility listed on the National Priorities List, and (3) any waste removed from a facility for which notification has been provided to EPA under section 103(c) of CERCLA (relating to certain nonpermitted facilities) or section 105 of CERCLA (relating to the establishment of the national contingency plan for the removal of oil and hazardous substances).

Procedure and administration

Liability for tax.—The tax would be imposed on the owner or operator of the qualified hazardous waste facility. In the case of disposal, the tax would be imposed at the time that the owner or operator of the facility signs (or is required to sign) the manifest or shipping paper accompanying the hazardous waste. In the case of on-site facilities, tax is imposed at the time at which the description and quantity of the hazardous waste are entered, or required to be entered, in the operating record. In the case of long-term storage, the tax would be paid at the expiration of one year following the date the waste was initially stored.

In the case of hazardous waste that is not disposed of or stored at a qualified facility as required in applicable regulations (e.g., "midnight dumping"), the tax would be imposed on the person disposing of or storing the hazardous waste.

Credit for prior tax.—Under the bill, if a person pays tax on the long-term storage of a hazardous waste, and the same person subsequently disposes of the waste, a credit would be allowed against the otherwise applicable disposal tax for any tax previously paid on the storage of the waste. If one person pays tax on the long-term storage of a waste and subsequently delivers that waste to another person, who is the owner or operator of a qualified disposal facility, then a nonrefundable credit would be allowed to the first person.³²

Information reporting.—The bill would require any person liable for tax to keep records and comply with rules and regulations established by the Treasury Department to ensure proper assessment and collection of the tax. The Treasury Department would be directed to consult with EPA to ensure that records, statements, and returns for tax purposes be consistent, to the extent possible, with reports required to be submitted to EPA under the Solid Waste Disposal Act. As part of this coordination, the Treasury could require any generator, transporter, disposer, or storer of hazardous wastes to submit to the Treasury copies of records or reports required under the SWDA, the Marine Protection, Research and Sanctuaries Act, or the Safe Drinking Water Act.

³² For purposes of implementing these rules, in the case of fungible wastes, a "last-in first out" presumption would apply.

Allocation to Superfund

Revenues from the tax (technically, amounts equivalent to these revenues) would be allocated to the Superfund under the appropriate provision of CERCLA.

Effective date

The tax generally would be effective for hazardous waste received for disposal or placed into long-term storage on or after January 1, 1986.

Termination date

The tax imposed by the bill would expire after September 30, 1990.

Study

The bill would require the Secretary of the Treasury, in consultation with the EPA Administrator, to submit to Congress not later than January 1, 1987, and annually thereafter, (1) a report on the amount of revenues being collected by the tax imposed by the bill, and (2) the Secretary's recommendations (if any) for changes in the tax. These would include recommended changes in order to (1) raise the amount of revenue originally anticipated from the tax, (2) ensure that the tax is discouraging the environmentally unsound disposal of waste, and (3) ensure that the tax is being collected with maximum administrative feasibility.

VII. ISSUES RELATING TO THE REAUTHORIZATION AND FINANCING OF SUPERFUND

A. Funding Level of the Superfund Program

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

The Environmental Protection Agency ("EPA") recently estimated that the Federal cost of cleaning all current and future sites on the National Priorities List will total \$9.1-14.5 billion in 1983 dollars.³³ Some have argued that these estimates are too low because of optimistic assumptions concerning the total number of hazardous sites that exist, and the proportion of these sites 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 \$39 billion.³⁴ The Congressional Office of Technology Assessment estimates that as many as 10,000 sites will require Superfund cleanup at an estimated cost of \$100 billion over the next 50 years.³⁵ Thus, there is at present a large amount of uncertainty about the level of Superfund expenditures required to clean the nation's hazardous waste sites.

The second issue related to funding levels is the rate at which the sites should be cleaned up. 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, the EPA has stated that it will not be able to spend productively more than \$5.3 billion over the 1986-1990 period.

The Congressional Research Service ("CRS") analyzed a number of alleged obstacles to a more rapid program of hazardous waste cleanup including shortages of analytical laboratory capacity, experienced personnel, and permitted storage, treatment, and disposal facilities. CRS concluded that the main difficulty in accelerating the rate of Superfund cleanup is likely to be inadequate State matching funds rather than a lack of adequate laboratory capacity, personnel, or waste management facilities.³⁶

The Congressional Office of Technology Assessment ("OTA") has recommended a two-part strategy of cleanups that could take 50

³³ U.S. Environmental Protection Agency, "Extent of the Hazardous Release Problems and Future Funding Needs" CERCLA section 301(a)(1)(C) Study" (December 11, 1984), pp. 4-10.

³⁴ General Accounting Office, *Cleaning Up Hazardous Wastes: An Overview of Superfund Reauthorization Issues*, GAO/RCED-85-88, (March 29, 1985).

³⁵ U.S. Congress, Office of Technology Assessment, *Superfund: Strategy*, (April 1985).

³⁶ U.S. Congress, Congressional Research Service, *Superfund: How Many Sites? How Much Money?*, (March 6, 1985).

years.³⁷ The first part, for perhaps 15 years, would focus on site identification, response to imminent health and environmental hazards, and design of a long-term program that would permanently clean hazardous sites. The second part of the strategy would focus on permanent site cleanups using advanced technology to render waste nonhazardous. OTA argues that an overly rapid expansion of the Superfund program could result in a waste of Superfund resources if cleanup actions fail to render wastes nonhazardous:

“Spending large sums before specific cleanup goals are set and before permanent cleanup technologies are available leads to a false sense of security, a potential for inconsistent cleanups nationwide, and makes little environmental sense.” (p.4)

It has been suggested that 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 effectively would 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 terminated just as the demand for Fund resources sharply rises in the construction phase of the program.

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 Superfund; through fiscal 1984, appropriations from general revenues have amounted to 12.2 percent of combined Superfund revenues from taxes and general appropriations. 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 may be no direct connection between past beneficiaries of cheap waste dis-

³⁷ *Ibid.*

posal 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 that 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. 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 cleanup of abandoned waste sites.

Advocates of the feedstock tax argue that it is appropriate and equitable to place the financial burden of cleaning hazardous waste sites on the industries responsible for creating the problem.³⁸ 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 a significant amount of hazardous waste cleanup from general revenues. As an alternative to general revenue appropriations, a number of broad-base tax alternatives have been proposed to finance a portion of the Superfund. These proposals include corporate taxes that would be computed on the basis of net receipts, manufacturing value added, and earnings and profits. Such taxes would spread the costs of cleanup broadly over a large number of firms, and would be imposed at relatively low tax rates.

C. Chemical Feedstock Tax

CERCLA imposed an excise tax on 42 chemical feedstocks and on petroleum. The main criterion for determining the list of taxable feedstocks was the prevalence of hazardous wastes derived from these feedstocks. The basic feedstock tax rates were set at \$4.87 per ton for petrochemicals, \$4.45/ton for inorganic chemicals, and

³⁸ 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.

\$0.0079 per barrel for petroleum.³⁹ 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 organic, inorganic, and petroleum wastes estimated to be found in hazardous waste sites (based on data available in 1980). 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 also would apply to specified feedstocks used in the production of certain fuels and transitory chemicals that occur in metal refining processes.

The feedstock tax has been criticized as arbitrary and potentially damaging to industry. Feedstock taxes are not based on either the degree of hazard or volume of wastes derived from these feedstocks. Thus, it is argued that a tax on the disposal of hazardous wastes would be more equitable than the feedstock tax.

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 that led Congress to establish the program. According to a report prepared for the EPA, 71 percent of all regulated hazardous wastes are produced by the chemical and petroleum refining industries that are the primary payors of the feedstock tax.⁴⁰ Most hazardous wastes or substances are made from the feedstocks subject to tax, and the vast majority of those substances ranked highly hazardous at waste sites are taxed feedstocks or their derivatives.

D. Effect of Feedstock Tax on Trade

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 oxide is a taxable feedstock; however, imported batteries are not taxed. Thus, disregarding transportation costs, imported automobile batteries (made with untaxed lead oxide) have a cost advantage over those produced in the United States. Similarly, exports of U.S.-produced batteries suffer from a cost disadvantage relative to foreign-produced batteries.

³⁹ Compounds (e.g., arsenic trioxide) were taxed at a fraction of the rate imposed on their constituents (i.e., arsenic) based on percentage composition.

⁴⁰ Westat, Inc., *National Survey of Hazardous Waste Generators and Treatment, Storage and Disposal Facilities Regulated Under RCRA in 1981*, (April 1984).

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 at present tax rates. The maximum tax imposed by current law on any chemical is 2.0 percent of the wholesale price estimated in 1980. By comparison, the value of the dollar against a group of 11 major foreign currencies increased by about 10 percent over the last 6 months of 1984, effectively raising the price of U.S. chemical exports by that amount.⁴¹ 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 to competition from plants established near low cost sources of natural gas in the Middle East and elsewhere.⁴²

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 that affect the costs of domestically produced goods.

Current law does not provide an exemption for feedstocks that are exported. Some argue that such an exemption is necessary to prevent U.S. producers of 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. However, it can be argued that an export exemption would adversely affect U.S. purchasers of feedstocks, since they will have to compete against, for example, Canadian or Mexican manufacturers who would be able to purchase feedstocks on a tax-free basis. These foreign purchasers 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 feedstocks.

E. Tax on Hazardous Waste

Several basic issues arise in the discussion of a tax on hazardous waste in the context of financing the Superfund program: incentive effects; predictability of revenues; administrative concerns; trade effects; and appropriate financing sources for the particular expenditures authorized under the program.

In analyzing the effects of proposed taxes on hazardous waste it is useful to distinguish between "disposal" and "generation" taxes. Under a waste disposal tax, wastes that enter the environment are subject to tax. Treatment, reclamation, and recycling of waste are exempt; however, residual wastes from these processes that enter

⁴¹ U.S. Congress, Congressional Research Service, Memorandum prepared for the House Committee on Energy and Commerce Subcommittee on Commerce, Transportation, and Tourism, (March 21, 1985), p. 7.

⁴² U.S. EPA, "Impact of CERCLA Taxes on the U.S. Balance of Trade," CERCLA Section 301(a)(1)(F) Study, Final Report, (December 1984).

the environment are subject to tax. Under a waste generation tax, the generation of waste, rather than its disposal, is subject to tax. H. R. 2208 (Reps. R.M. Hall and Fields), H.R. 2018 (Reps. Schneider and Wyden), and the hazardous waste tax in H.R. 1775 (Rep. Moore) are structured generally as disposal taxes. The Administration's waste tax proposal, like the hazardous waste tax in H.R. 2022 (Rep. Sikorski), can be viewed as a hybrid approach combining, in effect, a relatively low-rate generation tax on all hazardous waste with a surtax on certain types of disposal.

Incentive effects

A rationale for a hazardous waste 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. 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. A disposal tax based solely on the social cost of waste disposal generally would exempt proper treatment and recycling of hazardous wastes and tax only the untreated hazardous residuals from these processes upon ultimate disposal.

A disposal tax, unlike a feedstock tax, has the effect of creating direct economic incentives for waste reduction and treatment. First, at the production level, there is an incentive to adopt manufacturing processes that 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 that must be disposed. Finally, at the disposal stage, there is an incentive to use presumably 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.

It is unclear, however, if adequate information exists about the degree of hazard of different wastes and the environmental soundness 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 that provided lower tax rates or exemptions for certain types of treatment or disposal could increase the amount of waste flowing into less heavily taxed 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 disposal of hazardous waste. For example, under the Administration's proposal (as introduced in H.R. 1342, by request), deep well injection would in many cases be taxed at a lower rate than

biological wastewater treatment. The inability to define adequately hazardous wastes and to 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.

A waste generation tax would promote environmental policy by discouraging the generation of hazardous waste; however, unlike a disposal tax, it would not create an incentive or disincentive for any particular method of treatment or disposal. A waste generator's choice among treatment and disposal methods would be determined primarily by the costs of alternative technologies and EPA regulations, rather than by the tax Code.

Under either a disposal or a generation tax on hazardous waste that is collected at regulated treatment, storage, and disposal facilities, some waste likely will escape taxation because of gaps in the RCRA regulatory system. For example, hazardous waste that is mixed with domestic sewage and delivered to a publicly-owned treatment works ("POTW") is regulated under the Clean Water Act instead of RCRA. Consequently, a tax on hazardous waste imposed at RCRA regulated facilities will be avoided by generators who dispose of their waste in a municipal sewer system. Thus, a waste-end tax may encourage firms to divert hazardous wastes into the municipal sewer system rather than delivering wastes to a RCRA regulated hazardous waste facility.

Predictability of revenues

Twenty-three States currently employ or have employed some form of waste-based tax.⁴³ The General Accounting Office (GAO) recently studied the experience with waste-end taxes in New York, California, and New Hampshire, and concluded that⁴⁴

" . . . 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.⁴⁵ Florida replaced its waste-end tax with a feedstock tax in 1983 after discovering that administrative costs exceeded revenues. The State experience with disposal taxes raises the issue that a revenue shortfall might also occur at the Federal level.

⁴³ Fred C. Hart Associates, Inc. "CERCLA Funding Options," pp. 21-22.

⁴⁴ GAO, *State Experiences With Taxes on Generators or Disposers of Hazardous Waste* (May 4, 1984), p. ii.

⁴⁵ ICF, Inc. "Briefing on CERCLA Tax Alternatives," prepared for the Environmental Protection Agency, part II, p. 14.

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 hazardous waste taxes have been enacted since 1980 and are relatively new. The "learning curve" syndrome may be responsible for the greater than 90-percent revenue shortfall in the Federal disposal tax enacted in the CERCLA of 1980 to fund the Post-closure Liability Trust Fund.⁴⁶ A third cause of 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.⁴⁷ In combination with State 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.⁴⁸ 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 96 percent of all hazardous waste is disposed of on site.⁴⁹ As a result, some argue that an improperly designed waste-end 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 that 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 priority sites are likely to increase over time.

Hazardous waste generation is a considerably larger tax base than hazardous waste disposal (because waste that is treated is not excluded). Thus, to raise an equal amount of revenue, a lower rate of tax is required if waste generation, rather than disposal, is subject to tax. At a lower tax rate, a waste generation tax is less likely to result in midnight dumping, and other causes of revenue shortfall, than is a disposal tax. Also, tax revenues from a generation tax are likely to be more stable than a tax imposed on particular types of disposal, since it is more difficult for taxpayers to reduce waste generation than it is to change disposal methods.

⁴⁶ According to the most recent IRS data, the post-closure tax raised an average of only \$1.5 million per quarter in the first two quarters of fiscal 1984 relative to EPA projections of \$25 million per quarter when the tax was enacted in 1980.

⁴⁷ ICF, Inc. "Briefing on CERCLA Tax Alternatives," part II, p. 20.

⁴⁸ *Ibid.*, pp. 18-19.

⁴⁹ Westat Study.

Administrative concerns

Some have questioned whether the current RCRA regulatory system is adequate for assessing, collecting, monitoring, and enforcing a waste-end 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.⁵⁰ The GAO concluded that current data were inadequate for determining both 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.

Another issue is the relatively high administrative cost of hazardous waste taxes. The current Superfund tax is imposed on 42 feedstocks and collected from approximately 600 taxpayers. On the other hand, a hazardous waste tax might be imposed on more than 430 wastes regulated under RCRA, and collected from approximately 5,000 on-site and off-site hazardous waste disposal facilities.⁵¹ The Internal Revenue Service ("IRS") 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. However, the distinctions among these activities under present law are not always clear.

In addition, since RCRA allows approved State programs to administer the Federal requirements, it is unclear to what extent Federal tax based on RCRA ultimately would 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 that 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."⁵²

The Congress in 1984 adopted amendments to the RCRA which *inter alia*, control certain questionable treatment practices and expand the number of generators subject to the statute. If a dispo

⁵⁰ ICF, Inc., "Briefing on CERCLA alternatives," p. 26.

⁵¹ *Ibid.*, p. 12.

⁵² *Chemical Week*, "Getting RCRA Under Control" (June 9, 1982), p. 36.

al tax is tied to 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 to issue regulations consistent with EPA's regulations.

For example, if the EPA were to issue regulations listing a new hazardous waste, then the definition of hazardous wastes under RCRA could differ from the definition for purposes of the waste-end tax. Under such circumstances, the environmental regulations would require more waste to be delivered to RCRA regulated hazardous waste facilities than would be subject to the waste-end tax. Consequently, hazardous waste facility operators would have to determine the fraction of waste that is subject to tax. Such determinations would not be required under the RCRA regulations so that the waste-end tax could require additional recordkeeping. The Treasury would in many cases seek to tax newly listed hazardous waste on the grounds of simplicity and equity. Pressure might be brought to bear on the EPA not to list new hazardous waste because of the collateral tax consequences. Thus, the enactment of a sizable waste-end tax could result in additional pressure for EPA to delist existing hazardous wastes or to fail to list new hazardous wastes.

There may be difficulty in administering a disposal tax where waste is stored or treated in several waste management units prior to ultimate disposal. To prevent double taxation it generally will be necessary to provide a credit for tax paid when waste is moved from unit to another. Problems may arise where the rate of tax varies depending on the type of treatment unit. Also, some types of treatment (e.g., neutralization of acids by the addition of a basic compound) may increase the amount of waste material. This could result in a tax credit for a larger amount of waste than was originally subject to tax. The operating logs that hazardous waste facilities are required to maintain under RCRA may be inadequate for purposes of computing tax credits that may arise when waste is moved from one treatment, storage, or disposal unit to another. Such difficulties generally would be avoided by taxing the generation of hazardous waste (regardless of the method of treatment or disposal) rather than the disposal of such waste.

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 other types of 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.

Some 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 to \$75 per barrel, which could be more than the tax liability. Under the existing post-closure tax, some small waste generators currently do not bother to determine the dry weight content of their wastes and pay the 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).

As a practical matter, it may be quite difficult to develop comprehensive regulations prescribing the method of testing each of the hundreds of hazardous wastes to determine accurately the water content. For example, evaporative methods are not accurate for volatile wastes, while the Karl Fischer titration procedure is ineffective for testing wastes that contain significant amounts of acids or aldehydes. The regulations would also have to specify the frequency of sampling continuous waste streams because water content may be variable. For example, in many wastewater treatment facilities the diluteness of the waste stream surges after it rains because storm water and hazardous wastes share a common sewer system. Finally, EPA enforcement personnel would likely be required to verify the analytical procedures and sampling methods of taxpayers, since IRS agents do not have the required expertise in chemistry.

Trade effect

Like the feedstock tax, a waste-end tax raises the price of manufacturing certain products in the United States. This effectively taxes exports and subsidizes imports of such products. However, depending on the tax rate imposed, the impact of a waste-end tax on individual businesses may be many times larger than the feedstock tax. The feedstock tax in current law was designed to prevent an increase in production costs of more than 2.0 percent; however, a waste-end tax could amount to a much larger percent of manufacturing costs for products whose fabrication involves large volumes of hazardous wastes. For example, a 1983 survey of off-site disposal charges, prepared for the EPA, found that the cost of landfill disposal for bulk wastes ranged from \$28 to \$100 per metric ton, and the cost of land treatment ranged from \$5 to \$24 per metric ton.⁵³ Thus, a tax of \$10 per ton on land disposal, approximately the rate proposed by the Administration, could raise the cost of landfill by 10 to 36 percent, and the cost of land treatment by 42 to 200 percent. Consequently, waste-intensive products could be priced out of the market by imports from countries that 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 some would welcome the export of industries that 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 waste-end tax could be more highly correlated with the generation of wastes found at Superfund sites, it is a more appropriate tax base.

⁵³ Booz-Allen, *Review of Activities of Firms in the Commercial Hazardous Waste Management Industry*, 1983, report SW-894.

Opponents of a waste-end tax respond that this argument is not valid to the extent that a large volume of waste 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 that the tax is tied to the existing RCRA regulatory system, disposal which falls outside that system would not be subject to the tax. Further, those companies currently disposing of waste may not be the same companies that generated the waste found in Superfund sites.

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.

The Administration proposal would repeal the Post-closure Liability Trust Fund enacted in 1980. There are several arguments for or against 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 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 of 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 liability insurance policies may be cancelled without cause by the insurer and are written to cover claims made during the coverage period of the insurance (claims-made basis) rather than when pollution actually occurs (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.⁵⁴

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 established (i.e., "insolvency" fund). 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 medical costs, income losses, pain and suffering, and other items that would not be compensated by the Superfund.

Another alternative to repeal is to restructure the existing post-closure tax and trust fund more along the lines of private environmental impairment liability ("EIL") insurance policies. Under this alternative, the Federal government would set premiums for RCRA facilities based on the risk of a release into the environment and the potential damage cause by such a release. In addition, the government, like a private insurer, would require participating hazardous waste facilities to pay a certain portion of any damages. For example, participating facilities might be required to pay the first \$1 million of damages resulting from a release (i.e., a "deductible"). Following the private insurance model, the government would only assume liability for claims filed during the coverage period (claims-made basis). To maintain coverage, hazardous waste facility owners might be required to pay annual premiums even after their facilities were closed under RCRA. The entrance of the Federal government into the EIL insurance market might be justified if the private insurance market were incapable of absorbing the risks associated with hazardous waste facilities. The Federal government participates in the insuring of nuclear power plants primarily for this reason.

G. Natural Resource Damage Claims

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. The

⁵⁴ 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 1983.

Administration proposal 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 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 four States have filed damage claims; however, claims from these States total \$2.7 billion. Once the provision is fully implemented, the amount of claims eventually could be much larger. Thus, the Administration viewed it 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 the Superfund should be used to compensate 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 substantial expense to restore or replace these resources if they are not paid by the Fund, since solvent parties responsible for the damages often cannot be located. Of course, taxpayers finance these restoration or replacement expenditures through additional State and local taxes. Thus, if the Fund pays for these expenses, they are borne by the users and producers of chemicals 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.

