[JOINT COMMITTEE PRINT]

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

SCHEDULED FOR HEARINGS

BEFORE THE

COMMITTEE ON FINANCE

ON APRIL 25 AND 26, 1985

PREPARED BY THE STAFF

OF THE

JOINT COMMITTEE ON TAXATION

APRIL 24, 1985

U.S. GOVERNMENT PRINTING OFFICE

46-392 O WASHINGTON : 1985 JCS-11-85

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INTRODUCTION

The Committee on Finance has scheduled public hearings on the reauthorization of the Hazardous Substance Response Trust Fund ("Superfund") on April 25 and 26, 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 pamphlet [1] 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 provisions of S. 51 (The Superfund Improvement Act of 1985) as reported by the Senate Committee on Environment and Public Works on March 7, 1985 (report filed on March 18, 1985, S. Rep. No. 99–11). S. 51 extends and expands the Superfund program authorization statute. (On April 15, 1985, S. 51 was sequentially referred to the Committee on Finance for the purpose of considering title II of the bill and any provisions relating to revenues for the Hazardous Substance Response Trust Fund.) Part five summarizes the Administration's Superfund reauthorization proposal, which was introduced, by request, as S. 494 (nonrevenue aspects) and S. 972 (revenue aspects). Part six summarizes the other Senate bills, introduced thus far in the 99th Congress, relating to financing of the Superfund. Part seven analyzes the 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 the Reauthorization and Financing of the Superfund* (JCS–11–85), April 24, 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 chemicals is imposed on the sale or use of 42 specified organic and inorganic substances if they are produced in or imported into the United States. The taxable chemicals generally are chemicals that are hazardous or chemicals which may create hazardous products or wastes when used. The rates vary from 22 cents per ton to $4.87 per ton. (See Table 1 for a list of current law tax rates on chemical feedstocks.)

The taxes generally 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 were to exceed $900 million, and if the unobilgated balance on the following September 30 would exceed $500 million, even if these excise taxes were to be suspended for the calendar year in question. Further, the authority to collect taxes would 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 which is received at a qualified hazardous waste disposal facility and which will remain at the facility after its closure. These tax receipts are deposited into the Post-closure Liability Trust Fund. This trust fund is to assume completely the liability, under any law, of owners and operators of closed hazardous waste disposal facilities which meet cer-

tain 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.

B. S. 51 As Reported by the Committee on Environment and Public Works

S. 51, as reported by the Committee on Environment and Public Works, extends the Superfund for five years (through September 30, 1990) at an aggregate funding level of $7.5 billion.

C. Administration Proposal (S. 494 and S. 972) [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:

(1) 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.

(2) A tax on the treatment, storage,[3] disposal (including ocean disposal), or export of hazardous wastes ("waste management" tax), effective October 1, 1985. This tax would be imposed at two distinct rates: (1) a higher rate ($9.80 per ton in fiscal 1986, phasing up to $16.32 in fiscal 1990) for hazardous waste received at a landfill surface impoundment, waste pile, or land treatment unit,[4] and (2) a lower rate ($2.61 per ton in 1986, phasing up to $4.37 per ton in 1990) for ocean disposal, export, or hazardous waste received at a facility other than those listed above (e.g., at a deep well injection facility). These rates would further be adjusted to compensate for shortfalls from overall Superfund revenue targets. Exemptions would be provided for certain hazardous waste disposals pursuant to removal or remedial actions under CERCLA, and for certain waste generated at Federal facilities; however, no general exemption would be provided for the treatment of hazardous wastes. The

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[2] Nonrevenue aspects of the Administration proposal were introduced by Sen. Stafford at the request of the Administration, as S. 494. The revenue aspects were separately introduced as S. 972.

[3] On-site storage of 90 days or less is exempt, but all off-site storage is taxable.

[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").

waste management tax would be 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 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.

D. Other Senate Bills Relating to Financing of Superfund

S. 14 (Sens. Moynihan and Bentsen)—"Hazardous Substance Response Act of 1985"

This bill would impose a waste end tax designed to raise approximately $1.5 billion for the Superfund over a 5-year period. This tax would be intended as a partial, rather than an exclusive, source of revenues for the Superfund.

The tax under S. 14 would be imposed on the disposal or long-term storage of hazardous waste (as defined under RCRA). The tax would be imposed at four different rates: (1) a $45 per ton rate for hazardous waste disposed of by landfill, in waste piles, or by surface impoundment (as defined under RCRA); (2) a $25 per ton rate for ocean dumping or 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 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 pursuant to CERCLA provisions.

The tax under S. 14 would be effective on January 1, 1986, and would expire on 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 Treasury's recommendations for changes (if any) in the tax.

Revenue Amendment to S. 51 (Sen. Stafford)

S. 51 itself does not contain a revenue title; however, a proposed amendment to S. 51, introduced by Senator Stafford, is intended to raise $7.5 billion over a five-year period, using the following revenue sources:

(1) An increased tax rate of 4.5 cents per barrel on crude oil (the present law rate is 0.79 cents per barrel).

(2) An expanded tax on chemical feedstocks, including new taxable substances and increased rates on substances presently subject to tax.[5] The tax rates would be indexed for inflation by reference to the producer price index for organic or inorganic chemicals (as appropriate) and there would be exemptions for exported chemicals and substances used to produce animal feed (in addition to the present law exemptions). The Treasury Department and the International Trade Commission would be directed to report to Congress on the feasibility of a tax on imported chemical derivatives, as a supplement to the feedstocks tax.

The expanded feedstocks and petroleum taxes would generally be effective from January 1, 1985, through September 30, 1990. These taxes would terminate earlier than September 30, 1990, on any date on which the Treasury Department, in a manner to be prescribed by regulations, determines that the sum of amounts received by reason of the petroleum, feedstock chemical, waste end and corporate net receipts taxes (proposed by the amendment) will equal $6.47 billion.

(3) An "environmental toxics" tax on (a) the disposal (or long-term storage) of hazardous waste at a RCRA facility, or (b) any other release of a hazardous substance (using the broader CERCLA definition) into the atmosphere. The tax would be imposed at three rates: (1) a $150 per ton rate for land disposal (including landfills, surface impoundments, or waste piles); (2) a $75 per ton rate on Federally permitted releases of hazardous substances; and (3) a $150 per ton rate on other hazardous substance releases. If the owner or operator of a facility can establish the water content of a hazardous waste or substance, the owner or operator could elect to pay a tax (at the general rates) on a "dry-weight" basis. Exclusions from the disposal tax would be provided for certain disposals and removals under CERCLA.

The environmental toxics tax generally would be effective from the date of enactment through September 30, 1990. The Treasury would be directed to report to Congress concerning the amount of revenues being collected and its recommendations (if any) for improving the tax.

(4) A .014 percent tax on corporate net receipts in excess of $75,000,000. Net receipts would equal gross receipts minus the cost of goods sold by the taxpayer during the taxable year. This tax would be effective on January 1, 1986.

The trust fund provisions of S. 51 (included in the reported bill) would also authorize general revenue appropriations to the Superfund of $44 million per year for fiscal years 1986 through 1990, while retaining the present law expenditure purposes. The bill would further terminate the authority to collect all Superfund taxes when and if cumulative Superfund revenues during the reauthorization period (not including interest and recoveries) total $7.5 billion.

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[5] The taxable substances and applicable tax rates are included as table 8 in the explanation of this amendment.

S. 596 (Sen. Bradley)—"Superfund Extension and Improvement Act of 1985"

This bill would raise $7.5 billion for the Superfund over a five-year period, using three primary tax revenue sources:

(1) A five-year extension of the taxes on petroleum and feedstock chemicals (Code secs. 4611 and 4661), at their present law rates. These taxes would terminate on September 30, 1990; however, these taxes (together with the other Superfund taxes) would expire earlier if Treasury reasonably estimates that cumulative Superfund revenues (not including interest and recoveries) will equal or exceed $7.5 billion.

(2) A waste end tax identical to that included in S. 14, introduced by Senators Moynihan and Bentsen (discussed above).

(3) A tax on the net receipts of any corporation which has gross receipts in excess of $50,000,000 for any taxable year. This tax would be imposed at a rate of 0.083 percent of taxable net receipts, defined as the excess (if any) of gross receipts over the costs of goods sold by the taxpayer for the taxable year. The method for determining cost of goods sold would be established by Treasury regulations. This tax would be effective for taxable years beginning on or after January 1, 1986.

The bill (S. 596) would also allocate $44 million per year to the Superfund from general revenues (i.e., the present law level of appropriations) for fiscal years 1986 through 1990. S. 596 also includes trust fund and other nonrevenue provisions which are the same as S. 51, as reported by the Committee on Environment and Public Works. The bill further includes a specific cleanup schedule for Superfund sites.

S. 886 (Sen. Proxmire)—"Hazardous Waste Reduction Act of 1985"

This bill would impose a tax on all forms of land and ocean disposal of hazardous waste which are regulated by RCRA, as well as on exports of hazardous waste and other unregulated placements of hazardous waste (subject to certain exceptions). 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, which 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 being closed by EPA under RCRA. The tax is intended to raise $286 million per year, as part of a comprehensive Superfund funding package. Tax rates would be increased for any fiscal year during which Treasury estimated that this target would not be met.

The tax under S. 886 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.

S. 955 (Sens. Mitchell and Chafee)—"Superfund Revenue Act of 1985"

This bill is intended to raise $7.5 billion over a five-year period (not including interest and recoveries), from the following revenue sources:

(1) An increased tax rate of 1.13 cents per barrel on crude oil.

(2) A tax rate on the same chemical feestocks that are taxed under present law, with increased rates on certain substances.[6] These tax rates would be indexed for inflation by reference to the producer price index for organic and inorganic chemicals (as appropriate), beginning in 1986.

The expanded feedstocks and petroleum taxes would be effective from October 1, 1985, through September 30, 1990.

(3) A tax on the treatment, storage, disposal, or export of hazardous waste. This tax would be imposed at a flat rate of $3.65 per metric ton, to be adjusted for inflation beginning in 1986. In the case of on-site waste water treatment facilities, the taxpayer could elect to pay tax only on the amount of hazardous waste generated rather than the amount of diluted waste actually treated.

This tax would be effective from October 1, 1985, through September 30, 1990.

(4) An 0.3-percent tax on corporate earnings and profits in excess of $5,000,000. The tax would be imposed on all corporations other than S corporations, RICs, and REITs. The tax would be effective for taxable years ending after September 30, 1985, and on or before September 30, 1990; for taxable years straddling October 1, 1985, the tax would be imposed on a proportional basis only.

The bill also authorizes general revenue appropriations of $187.5 million per year to the Superfund for fiscal years 1986–1990.

S. 957 (Sens. Bentsen and Wallop)—"Superfund Excise Tax Act of 1985"

This bill would impose a tax on the sale, lease, or import of tangible personal property by the manufacturer or importer of the property, the revenues from the tax to be allocated to the Superfund. The tax would be limited to manufacturers or importers having $100,000 or more of annual gross receipts from manufacturing. A credit against the tax would be allowed for direct material purchases during the taxable year (i.e., the tax would be similar to a value added tax). Exports of taxable goods and sales (or imports) by governmental units and tax-exempt entities would be exempt from the tax.

The rate of tax is not specified by the bill; this rate would be determined depending upon the amount of revenue necessary (together with any other taxes) in order to finance the Superfund in any fiscal year.

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[6] The taxable substances and applicable tax rates are included as Table 9 in the explanation of this bill.

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.[7]

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.

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[7] 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 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 triggered-off 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 $227 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 feedstock chemicals

Present law (sec. 4661 of the Code) imposes an excise tax on the sale or use of 42 specified chemical substances ("feedstock chemicals") by the manufacturer, producer, or importer thereof. These chemicals generally are hazardous substances or may create hazardous products or wastes when used. The tax is imposed on feedstock chemicals manufactured in the United States or entered into the United States for consumption, use, or warehousing. The tax rates are specified per ton of taxable chemical, and vary from 22 cents to $4.87 per ton. In the case of a taxable chemical which is a gas (e.g., methane), the tax is imposed on the number of cubic feet of such gas which is equivalent to 2,000 pounds on the basis of molecular weight. (See Table 1 for a list of taxable chemicals and applicable tax rates under present law.)

Table 1.—Present Law Excise Tax on Chemicals

[Dollars per ton]

Chemical	Tax rate
Organic substances:	
Acetylene	4.87
Benzene	4.87
Butadiene	4.87
Butane	4.87
Butylene	4.87
Ethylene	4.87
Methane	3.44
Napthalene	4.87

Table 1.—Present Law Excise Tax on Chemicals—Continued

[Dollars per ton]

Chemical	Tax rate
Propylene	4.87
Toluene	4.87
Xylene	4.87
Inorganic substances:	
Ammonia	2.64
Antimony	4.45
Antimony trioxide	3.75
Arsenic	4.45
Arsenic trioxide	3.41
Barium sulfide	2.30
Bromine	4.45
Cadmium	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
Phosphorus	4.45
Potassium dichromate	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 rates on petroleum and chemical feedstocks were set 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 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 feedstock chemicals. 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 substance 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.) A second 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 feedstock chemicals. First, the 1984 Act provided an exemption for petrochemicals otherwise subject to the tax (i.e., acetylene, benzene, butane, butylene, butadiene, ethylene, methane, naphtalene, 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 feedstock chemicals 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 chemical taxes reach $1.38 billion (sec. 303 of CERCLA).[8]

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[8]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).[9]

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 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 which will remain at the facility after the facility is closed. The tax is imposed on the owner or operator of the qualified hazardous waste disposal facility. It was

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

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intended that amounts equivalent to the revenues from this tax be deposited into the Post-closure Liability Trust Fund.

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

The post-closure tax applies to the receipt of hazardous waste after September 30, 1983. However, if as of September 30 of any calendar year after 1983, the unobligated balance of the Post-closure Liability Trust Fund had exceeded $200 million, no tax would have been imposed during the following calendar year. Further, authority to collect the 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 Waster 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 Substances 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 associated 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 ability. 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 statutes

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 be-

tween 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.

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

Section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1331) established a $35 million revolving fund maintained by fines, penalties, and appropriations of general revenue. The fund may be used for cleanup of releases of oil into navigable waters and restoration of accompanying natural resources. The Act also establishes strict joint and several liability pertaining to responsibility for cleanup expenses, and authorizes the fund to seek reimbursement from parties who release oil or designated hazardous substances into navigable waters.[10]

[10] Special oil spill compensation funds were also created under the Trans-Alaska Pipeline Authorization Act (TAPPA) (43 U.S.C. sec. 1651) (maximum $100 million fund), the Outer Continental Shelf Amendments of 1978 (43 U.S.C. sec. 1331) ($200 million fund), and the Deep Water Port Act of 1974 (33 U.S.C. sec. 1502) ($100 million fund), to compensate for damages from specified categories of oil spills. These funds are financed by per barrel fees on certain oil. Collection of the fee under the Deep Water Port Act was suspended by P.L. 98–419 (the Deep Water Port Act Amendments of 1984).

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

[Number of sites]

Site status	Through fiscal year 1984	Projected		
		Low estimate	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]	546	1,403	1,800	2,200

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

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

[1] Projected.
[2] Number of sites.
[3] Estimate.
[4] Number 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 1981–84

[In millions of dollars]

Item	1981	1982	1983	1984	Total, 1981–84
Receipts	145.0	307.4	331.6	367.7	1,151.7
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	9.0	26.6	40.0	44.0	119.6
Interest income	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	147.8	285.3	520.7
End of year cash balance	136.9	364.8	548.6	617.6	NA
Budget obligation	40.3	180.7	230.2	465.6	916.8
Removal and remediation	30.7	149.0	175.9	366.7	722.3
Enforcement program	2.5	8.4	17.7	26.7	55.3
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	0	18.4	44.8	63.2
Unobligated balance	104.8	231.5	319.7	227.0	NA

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 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 year—									
	1981 quarters III–IV		1982 quarters I–IV		1983 quarters I–IV		1984 quarters I–II		Total fiscal years, 1981–84	
	$	%	$	%	$	%	$	%	$	%
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.

IV. SUMMARY OF S. 51, AS REPORTED BY THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

In general

S. 51, as reported by the Committee on Environment and Public Works on March 7, 1985 (S. Rep. No. 99–11, filed on March 18, 1985), extends the Superfund for five years (through September 30, 1990) at an aggregate funding level of $7.5 billion, including tax revenues of $6.47 billion and general revenues of $1.03 billion. Although not containing a full revenue title, S. 51 specifies that an exemption from the chemical feedstocks tax (sec. 4661) is to be allowed for substances used to produce animal feed.[11]

Reauthorization provisions

As reported by the Committee on Environment and Public Works, S. 51 would extend and expand the Superfund program for 5 years at a total cost of $7.5 billion. Several provisions of the legislation would be likely to have a significant cost impact. These include the following provisions:

Scope of program.—The bill clarifies that the President should give primary attention in using Superfund proceeds to releases which present a public health threat, and specifies types of releases which are not covered by the Superfund, including certain contamination of groundwater resulting from natural causes. A special "savings clause" allows the President to respond to any release or threatened release, despite these exclusions, in emergency cases.

Cleanup standards.—The bill expressly defines the standards to be applied in cleaning up Superfund sites, requiring at a minimum that human health and the environment be protected by such cleanups. The specific remedy at any site is left to a case-by-case determination. However, the bill specifies that permanent solutions (e.g., treatment) are to be preferred to shorter-term response (e.g., containment of hazardous waste).

Limits on removal actions.—The bill would expand the criteria under which the general $1 million and one-year (formerly 6 months) duration limits on removal actions may be exceeded, allowing these limits to be exceeded whenever appropriate to achieve a permanent remedy.

Operation and maintenance costs.—The bill would require that when the remedial action is pumping and treatment of contaminated ground or surface waters, the Superfund must provide 90 percent of operation and maintenance costs for a period of 5 years (as opposed to 1 year under the current policy).

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[11] A proposed revenue amendment to S. 51, introduced by Senator Stafford and including specific tax proposals, is discussed in Part VI.

Health studies and toxicological profiles.—The bill would establish a program for conducting health studies at Superfund sites and for requiring health effects research on selected toxic chemicals for which there is inadequate data. This program is authorized at a minimum appropriation level of $50 million per year, or a 5-year total of $250 million. The bill further mandates establishment of a hazardous substance inventory for Superfund sites.

State credit for past expenditures.—The bill would allow a State to receive a credit for pre-Superfund expenditures against the law's required cost-sharing requirement. Additionally, where the State enters into a cooperative agreement with respect to a site on the National Priorities List, the State could receive credit for certain costs incurred prior to any obligation of Federal Funds.

Victims' assistance.—The bill would establish a 5-year, five State demonstration program to provide assistance to the victims of hazardous wastes and toxic chemicals. It is authorized to a funding level of $30 million per year, or $150 million over a period of 5 years; the funding source would be the general revenue authorization described above.

In addition to these provisions, S. 51 includes several procedural and enforcement changes, including increased penalties; a provision for real estate liens against certain responsible parties; and a provision that civil or administrative actions be allowed to be completed before contribution suits between responsible parties may proceed. The bill also requires an opportunity for public comment before remedial actions are taken or settlements agreed to, and allows citizen suits to enforce CERCLA requirements and to seek the performance of nondiscretionary duties by EPA.

Trust fund provisions

S. 51 would modify the present law trust fund provisions to authorize appropriations of up to $206 million per year for fiscal years 1986 through 1990 from general revenues. The bill would retain all present-law expenditure purposes, including natural resource damage claims; as under present law, such claims could not exceed 15 percent of amounts appropriated to the fund. S. 51 would further limit the authority to collect Superfund taxes during the 5-year period beginning October 1, 1985, to $6.47 billion.

V. DESCRIPTION OF ADMINISTRATION PROPOSAL (S. 494 AND S. 972)

A. Overview

The Administration proposal [12] 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 under present law, 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.[13] Also, the balance of the Post-closure Liability Trust Fund, as of September 30, 1985, would be transferred to the Superfund, in conjunction with the repeal of that Trust Fund (described below).

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[12] The proposal has been introduced by Senator Stafford, by request, as S. 494 (non-revenue aspects) and S. 972 (revenue aspects).

[13] 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.

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 end 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.

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) 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 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 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 unit [14] (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 end taxes, recoveries, penalties, 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, without delegating authority to Treasury to readjust the tax rates.

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

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

Fiscal year	Projected overall Superfund revenues (millions)
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. 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 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 quanitity 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.

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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.

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 environ-

mental 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 would also 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.

VI. OTHER SENATE BILLS RELATING TO FINANCING OF SUPERFUND

A. S. 14 (Sens. Moynihan and Bentsen)—"Hazardous Substance Response Act of 1985"

Overview

S. 14 ("The Hazardous Substance Response Act of 1985"), introduced by Senators Moynihan and Bentsen, would impose a "waste end" tax designed to raise approximately $1.5 billion of Superfund revenues over a five-year period. The tax would be imposed on four different categories of hazardous waste, depending on the method of disposal or storage used for managing the hazardous waste, 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 a 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.[15]

Hazardous waste subject to the tax would include any waste which 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 which is subject to recordkeeping requirements under sections 3002 and 3004 of that Act. The tax would not apply to any wastes which 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.[16] Qualified hazardous waste disposal facilities would mean

[15] 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).

[16] The terms "waste pile" and "surface impoundment" would be defined by reference to the SWDA.

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 composition of any hazardous waste so as to convert it to a nonhazardous waste.[17]

Tax would also not be imposed under the bill on the hazardous waste that is reclaimed. Reclamation includes (1) the processing of hazardous waste to recover a usable product (or to regenerate the waste), (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.[18]

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

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

As an alternative to the tax rates above, if the owner or operator of a qualified hazardous waste storage or disposal facility can 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).

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[17] 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 treated as nonhazardous wastes.

[18] 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.

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 which 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 under the provisions of 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 the State), (2) any waste removed from a faciity 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 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 disposal or storage 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 onsite facilities, 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.[19]

Information reporting.—The bill would require any person liable for tax to keep records and comply with rules and regulations es-

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

tablished 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.

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 on 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.

B. Revenue Amendment to S. 51 (Sen. Stafford)

S. 51, as reported by the Committee on Environment and Public Works, provides for a 5-year extension of the Superfund at an aggregate $7.5 billion funding level, not including interest and recoveries (discussed in Part IV above). A proposed amendment to S. 51, introduced by Senator Stafford,[20] is intended to raise this $7.5 billion over a five-year period, using the following revenue sources: (1) an extension of the petroleum tax at a 4.5 cent per barrel rate; (2) an expanded and (in some cases) increased tax on chemical feedstocks, to be indexed for inflation and including and export exemption; (3) a tax on disposals of hazardous waste as well as releases of hazardous substances (as defined by CERCLA) into the environment; and (4) a tax on a corporation's net receipts in excess of $75 million. The amendment would further direct a study of a tax on

[20] 131 Cong. Rec. S. 526 (Jan. 22, 1985). This amendment is a corrected version of an amendment orginally introduced on January 3.

imported chemical derivatives to complement the chemical feedstock tax. Total Superfund revenues also would include $206 million per year of general revenue appropriations.

In line with proposed funding level of S. 51, the authority to collect any Superfund taxes would terminate when the aggregate Superfund revenues during the reauthorization period equalled $7.5 billion.

Petroleum tax

The amendment would increase the present law environmental excise tax on petroleum from 0.79 cent per barrel tax to 4.5 cents per barrel, effective from January 1, 1985, through September 30, 1990. The tax would terminate earlier than September 30, 1990, on any date on which the Treasury Department, in a manner to be prescribed by regulations, determines that the sum of amounts received by reason of the petroleum, chemical feedstock, waste end and corporate net receipts taxes (proposed by the amendment) will equal $6.47 billion.

Tax on feedstock chemicals

Tax rates

The amendment would extend and expand the present law environmental excise tax on feedstock chemicals, so that the specified organic and inorganic substances sold by the manufacturer, producer, or importer would be taxed in accordance with the following table (Table 8).

Table 8.—Chemical Tax Rates Under Present Law and Proposed Revenue Amendment to S. 51

[Tax rates per ton, before any inflation adjustment]

Chemical substance	Present law	Proposed rate on sales during 1985	Proposed rate on sales after 1985
Organic chemicals:			
Acetylene	$4.87	$8.83	$10.23
Benzene	4.87	6.60	8.80
Butadiene	4.87	9.79	10.23
Butane	4.87	4.87	5.60
Butylene	4.87	5.15	6.87
Ethylene	4.87	6.89	9.19
Methane	3.44	3.44	3.44
Naphthalene	4.87	6.89	9.19
Propylene	4.87	5.87	7.82
Toluene	4.87	5.19	6.92
Xylene	4.87	7.70	10.23
Inorganic chemicals:			
Ammonia	2.64	2.64	3.52
Antimony	4.45	9.34	9.34
Antimony trioxide	3.75	7.87	7.88
Arsenic	4.45	9.34	9.34

Table 8.—Chemical Tax Rates Under Present Law and Proposed Revenue Amendment to S. 51—Continued

[Tax rates per ton, before any inflation adjustment]

Chemical substance	Present law	Proposed rate on sales during 1985	Proposed rate on sales after 1985
Arsenic trioxide	3.41	7.16	7.16
Barium sulfide	2.30	4.83	4.83
Bromine	4.45	9.34	9.34
Cadmium	4.45	9.34	9.34
Chlorine	2.70	3.05	4.07
Chromite	1.52	1.52	1.52
Chromium	4.45	9.34	9.34
Cobalt	4.45	9.34	9.34
Cupric oxide	3.59	7.54	7.54
Cupric sulfate	1.87	3.93	3.93
Cuprous oxide	3.97	8.34	8.34
Hydrochloric acid	0.29	0.61	0.61
Hydrogen fluoride	4.23	8.88	8.88
Lead oxide	4.14	0	0
Mercury	4.45	9.34	9.34
Nickel	4.45	9.34	9.34
Nitric acid	0.24	0.50	0.50
Phosphorus	4.45	9.34	9.34
Potassium dichromate	1.69	3.55	3.55
Potassium hydroxide	0.22	0.46	0.46
Sodium dichromate	1.87	3.93	3.93
Sodium hydroxide	0.28	0.59	0.59
Stannic chloride	2.12	4.45	4.45
Stannous chloride	2.85	5.98	5.98
Sulfuric acid	0.26	0.55	0.55
Zinc chloride	2.22	4.66	4.66
Zinc sulfate	190	3.99	3.99
Additional organix or inorganic chemicals:			
Acetone	0	8.64	8.64
Barium	0	0.81	0.81
Bis (2-ethylhexyl) phthalate	0	8.64	8.64
Carbon tetrachloride	0	8.43	8.43
Chlorobenzene	0	27.66	27.66
Chloroform	0	25.93	25.93
1,2-Dichloroethane	0	4.54	4.54
Etylbenzene	0	27.33	27.33
Lead	0	8.27	11.03
Methylene chloride	0	21.61	21.61
Methyl ethyl ketone	0	14.26	14.26
Pentachlorophenol	0	28.59	28.59
Phenol	0	44.95	44.95
1,1,2,2,-Tetrachloroethane	0	6.05	6.05

Table 8.—Chemical Tax Rates Under Present Law and Proposed Revenue Amendment to S. 51—Continued

[Tax rates per ton, before any inflation adjustment]

Chemical substance	Present law	Proposed rate on sales during 1985	Proposed rate on sales after 1985
1,1,2,2,-Tetrachloroethene	0	21.18	21.18
Trichloroethylene	0	60.51	60.51
1,1,1-Trichloroethane	0	39.33	39.33
Vinylchloride	0	11.24	11.24

For each year, the rates specified in the table 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 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 averages for the 12 months ending in September 1984.[21]

Exemptions

The amendment would retain the present law exemptions to the tax on feedstock chemicals, and add the following two exemptions.

Exports of taxable chemicals.—The amendment would provide that the tax on feedstock chemicals is not to apply to feedstock chemicals that are exported from the United States. In particular, the amendment 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 the purchaser cannot certify in advance that a substance will be exported, or if a tax has otherwise been paid on the exported substance, the person who paid the tax could claim a refund or credit (without interest) for the amount of the tax previously paid; such person would be required to repay the tax to the exporter or to obtain the exporter's written consent to his receiving the credit or refund. The Treasury would be authorized to prescribe necessary regulations for administering these provisions.[22]

Substances used to produce animal feed.—An exemption from the feedstock tax would be provided for nitric acid, sulfuric acid, phosphoric acid, or ammonia (or methane used to produce ammonia) used in a qualified animal feed use by the manufacturer, producer,

[21] Tax rates would not be reduced below the levels shown in Table 6 even if the producer price index declines.

[22] Rules similar to the rules of sec. 4221(b) (regarding sales for further manufacture or export for excise tax purposes) would apply in determining proof of export.

or importer, or else sold for use (or for resale for ultimate use) in a qualified animal feed use.[23] Qualified animal feed use would mean any use in the manufacture or production of animal feed or animal feed supplements, or of ingredients used in animal feed or animal feed supplements. If tax is paid and a substance is subsequently used in a qualified animal feed use, under Treasury regulations, the person so using the substance would be entitled to a credit or refund (without interest) of the tax paid. Conversely, if an exemption is allowed and a substance is subsequently sold or used for a non-animal feed purpose, the person so selling or using the substance would be subject to tax as if he had manufactured the substance.

Effective date

The amendments to the tax on feedstock chemicals would be effective from January 1, 1985.

Termination date

The tax would expire after September 30, 1990, with a provision for earlier expiration if the sum of Superfund tax revenues equals $6.47 billion (discussed above under the petroleum tax).

Environmental toxics tax

Imposition of tax

The amendment would impose a tax on (1) the release of any hazardous substance,[24] and (2) the receipt of a hazardous waste for disposal at a hazardous waste disposal facility.

Hazardous waste subject to the disposal tax (item (2) above) would include any waste (1) which is identified or listed under section 3001 of the Solid Waste Disposal Act (SWDA) as in effect on the date of enactment of the proposal, other than waste the regulation of which has been suspended by Congress, and (2) which is subject to recording or recordkeeping requirements under sections 3002 and 3004 of that Act. The tax would not apply to any wastes which 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 environment, following studies under section 8002 of the SWDA, and if EPA promulgates regulations for the disposal of such waste, the amendment directs EPA to transmit to Congress a recommendation for imposing a tax (if any) on the disposal or long-term storage of such waste. This tax could actually be imposed only when authorized by legislation.

Hazardous waste disposal facilities would mean any disposal facility issued a permit or accorded interim status under section 3005 of the SWDA. The term "disposal", in turn, would mean the discharge, deposit, injection, dumping, or placing of any hazardous

[23] The animal feed exemption is also included in S. 51 itself, effective on the date of enactment of that bill.

[24] For these purposes, the terms "release" and "hazardous substance" (as well as the term "environment") would have the meanings assigned by CERCLA. This is distinct from the term "hazardous waste," which would be subject to tax on disposal and is specially defined by the amendment.

waste into or on any land, air,[25] or water so that such hazardous waste may enter the environment.

Tax rates

The tax would be imposed on three categories of waste, depending upon the type of waste and the method of release or disposal involved:

(1) *Land disposal methods.*—A tax at $150 per ton would be imposed for hazardous waste (as defined by the amendment) disposed of by landfill, by surface impoundment, or in waste piles.[26]

(2) *Federally permitted releases.*—A tax of $75 per ton would be imposed on hazardous substances (as defined by CERCLA) released in compliance with federally permitted release.

(3) *Other releases.*—A $150 per ton rate would apply to hazardous substances (as defined by CERCLA) released in any other manner.

The tax would generally be imposed on a "wet-weight" basis (i.e., including the volume of water which is part of the hazardous substance or waste). However, under the amendment, Treasury is authorized to issue regulations providing that, if the owner or operator of a hazardous waste disposal or hazardous substance handling facility can establish the water content of the hazardous waste or substance deposited or released, then the owner or operator could elect to pay a tax (at the general rates) on the weight of the hazardous weight reduced by the weight of such water (i.e., on a "dry-weight" basis).

Exemptions

As indicated above, the disposal of hazardous waste which is exempt from regulation under RCRA would not be subject to the tax. Specific exclusions from the disposal tax are also provided for (1) the disposal of any waste 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 the State, and (2) any waste removed from a facility listed on the National Priorities List.

Procedure and administration

Liability for tax.—The tax would be imposed on the owner or operator of the qualified hazardous waste disposal facility (generally in the case of hazardous waste disposal), or the owner or operator of the hazardous substance handling or treatment facility (generally in the case of releases of hazardous substances). In the case of disposal at an off-site facility, 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 onsite facilities, the tax would be 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.

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[25] Thus, under this definition, the emission of hazardous waste into the atmosphere would constitute a taxable disposal.

[26] The latter two terms would be defined by reference to the regulations under sec. 3005 of the SWDA.

Credit for prior tax.—The amendment provides that, if a person pays tax on the long-term storage of a hazardous waste,[27] 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 a person pays tax on the long-term storage of a waste and subsequently delivers that waste to another person, who is the owner or operation of a qualified disposal facility, a credit would be allowed to the first person against any tax subsequently due from that person on the disposal or long-term storage of a hazardous waste.[28]

Information reporting.—The amendment would require any person who disposes of hazardous waste subject to the tax (or stores such waste for the year or more) 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 long-term 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, the Clean Air Act, the Clean Water Act, the Atomic Energy Act, the Uranium Mill Tailings Radiation Control Act, the Toxic Substances Control Act, or the Safe Drinking Water Act.

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 would be effective for hazardous waste received for disposal or placed into long-term storage on or after January 1, 1986 (i.e., on a prospective basis only).[29]

Study

The amendment 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 through 1989, (1) a report on the amount of revenues being collected by the environmental toxics tax imposed under the amendment, and (2) the Secretary's recommendations (if any) for changes in the tax. These would include recommended changes in order to (a) raise the amount of revenue originally anticipated from the tax, (b) ensure

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[27] The amendment does not specifically impose tax on the long-term storage of hazardous waste; however, it is understood that such a tax is intended.

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

[29] The amendment does not contain a specific termination date for the tax; however, the trust fund itself would be extended for five years only (i.e., through September 30, 1990). Additionally, authority to collect all Superfund taxes would expire when aggregate revenues during the reauthorization period reached $7.5 billion.

that the tax is discouraging the environmentally unsound disposal of waste, and (c) ensure that the tax is being collected with maximum administrative feasibility. The Treasury Secretary would further be required to study and recommend to Congress whether tax should be imposed on (1) releases of certain pesticides identified under the Federal Insecticide, Fungicide, and Rodenticide Act, and (2) chemicals which, according to the International Agency For Research on Cancer, have substantial evidence of carcinogenicity.

Corporate net receipts tax

General rules.—The amendment would impose a 0.014 percent tax on the net receipts of any corporation in excess of $75 million for any taxable year. Net receipts would be defined as the excess (if any) of gross receipts over the costs of goods sold by the taxpayer for the taxable year.

For purposes of the net receipts tax, all members of a controlled group of corporations [30] would be treated as one taxpayer. A similar rule would apply, under Treasury regulations, to trades or businesses (whether or not incorporated) which are under common control. The tax would apply to an unrelated business (within the meaning of Code sec. 512) of a tax-exempt orgnaization to the extent that net receipts from unrelated trades or businesses exceeded $75,000,000.

Effective date.—The net receipts tax would be effective for taxable years beginning after December 31, 1985.

Termination date.—The tax would not apply to any taxable year beginning after December 31, 1990. Authority to collect the petroleum, feedstock chemical, waste end and corporate net receipts taxes would terminate earlier if total Superfund revenues during the reauthorization period equal or exceed $7.5 billion.

Allocation to Superfund.—Revenues from the net receipts tax (technically, amounts equivalent to these revenues) would be deposited in the Superfund.

Study of imported derivatives tax

In connection with extending and expanding the chemical feedstocks tax, the amendment would direct the Treasury Department to study the economic effects of the feedstocks tax and the feasibility and desirability of imposing a tax on imported derivatives of substances subject to the tax. This study would be required to develop the methodology for selecting the list of substances and to list the substances which would be subject to such a tax and their corresponding item numbers in the Tariff Schedules of the United States. The International Trade Commission ("ITC") would further be directed to study the trade effects of the feedstocks tax with and without a tax on imported derivatives and the means of making a tax on derivatives compatiable with current international trade agreements. The Treasury would be required to submit the list of potential taxable substances by March 1, 1985, and the full Treasury report would be due June 1, 1985. The ITC report would be due 4 months after the Treasury list is submitted.

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[30] Determined using a 50-percent test and without regard to the special rules regarding insurance companies (sec. 1563(a)(4)) and tax-exempt employees' trusts (sec. 1563(e)(3)(C)).

C. S. 596 (Sen. Bradley)[31]—"Superfund Extension and Improvement Act of 1985"

Overview

S. 596 ("The Superfund Extension and Improvement Act of 1985"), introduced by Senator Bradley, is intended to provide $7.5 billion of financing for the Superfund over a five-year period. Financing is derived from three primary revenue sources: (1) an extension of the petroleum and feedstock chemicals taxes at present law rates; (2) a waste end tax identical to that provided in S. 14, introduced by Senators Moynihan and Bentsen; (3) a net receipts tax on corporations with annual gross revenues in excess of $50 million. Financing would also include $44 million per year of general revenue appropriations. The non-tax aspects of the bill are generally identical to S. 51, as reported by the Committee on Environment and Public Works (discussed in section IV, above); however, the bill would also include a target cleanup schedule for Superfund sites.

Petroleum and feedstock chemicals taxes

The bill would extend the petroleum and feedstock chemicals taxes at their present law rates, from October 1, 1985, through September 30, 1990. These taxes would terminate earlier than September 30, 1990, if the Secretary of the Treasury, in a manner prescribed by regulations, reasonably estimates that the sum of the amounts received in the Treasury by reason of the petroleum, feedstock chemicals, and waste end taxes will equal or exceed $7.28 billion.

Waste end tax

A waste end tax identical to that included in S. 14 would be imposed under the bill (see description of S. 14 above). This tax would be effective from January 1, 1986, through September 30, 1990.

Corporate net receipts tax

Imposition of tax.—The bill would impose a tax on the net receipts of any corporation which has a gross receipts in excess of $50 million for any taxable year. The tax would be imposed at a rate of 0.083 percent of taxable net receipts, defined as the excess (if any) of gross receipts over the cost of goods sold by the taxpayer for the taxable year. The method for determining cost of goods sold for purposes of this tax would be established by Treasury regulations.

For purposes of the net receipts tax, all members of a controlled group of corporations would be treated as one taxpayer. A controlled group would be determined using a 50-percent test without regard to the special rules regarding insurance companies (sec. 1563(a)(4)) and tax-exempt employees' trusts (sec. 1563(e)(3)(C)). A similar rule would apply, under Treasury regulations, to trades or businesses (whether or not incorporated) which are under common control. The tax would apply to unrelated business taxable income (within the meaning of Code sec. 512) of a tax-exempt organization,

[31] As a result of a clerical error, an identical bill was also introduced as S. 607.

but only when gross receipts from unrelated trades or businesses exceeded $50 million.

Effective date.—The net receipts tax would be effective for taxable years beginning after December 31, 1985.

Termination date.—The tax would not apply to any taxable year beginning after December 31, 1990.

Trust fund provisions

The trust fund provisions of the bill are identical to those of S. 51, as reported by the Committee on Environment and Public Works (see description of S. 51 above.) Thus, the bill would authorize general revenue appropriations to the Superfund of $44 million per year for fiscal years 1986 through 1990 and would retain the present law Superfund expenditure purposes.

The bill would termiante the authority to collect all Superfund taxes when, and if, cumulative Superfund revenues (not including interest, cost recoveries, and fines) during the reauthorization period total $7.5 billion.

Non-tax provisions

The non-tax provisions of the bill are similar to S. 51, as reported by the Committee on Environment and Public Works. However, the bill also includes a specific cleanup schedule for Superfund sites, which sets a goal of completing remedial action at all facilities listed on the National Priorities List (as of the date of enactment), to the maximum extent practicable, within five years. This would be accomplished by commencing remedial investigations and feasibiliity studies for these facilities at a rate of 130 or more facilities per year, and commencing actual remedial actions, at an equivalent rate, beginning at 1986. The bill would also set a goal of adding 1,600 new facilities to the National Priorities List by January 1, 1988, with investigations and studies of these sites being conducted at a target rate. Finally, the bill would require that preliminary assessments of all facilities listed on the Emergency and Remedial Response Information System (ERRIS) list as of the date of enactment be completed by January 1, 1987.

D. S. 886 (Sen. Proxmire)—"Hazardous Waste Reduction Act of 1985"

Overview

S. 886 ("The Hazardous Waste Reduction Act of 1985"), introduced by Senator Proxmire, would impose a tax on all forms of land and ocean disposal of hazardous waste which 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, which 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 (other than underground injection), 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 which 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) which 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.[32]

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 on or in which hazardous waste is placed. Qualifying facilities are defined as those operating pursuant to a permit or interim status under sec. 3005 of the SWDA, or under the an equivalent State program authorized by sec. 3006 of that Act.

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 waste generator who generates less than 100 kilograms of hazardous waste in any calendar month (small quantity generators). In addition, the tax would not apply to facilities or locations (including wastewater storage or treatment tanks) which 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 which do not render waste nonhazardous within one year of receipt (see discussion of exemptions from tax, below). The $20 per ton rate would also apply to export or ocean disposal and to the placement

[32] 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.

of taxable 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 taxable 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, 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.[33]

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 which is completed within one year of after the first taxable receipt or placement of the waste.[34] Qualified treatment or conversion would include any method, technique, or process which changes taxable hazardous waste into a substance which 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 which 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 wastewater treatment facilities; these facilities are the subject of a separate exemption (discussed below).

The treatment or conversion exemption would generally take the form of a credit (or refund) for tax paid by the person accomplishing the treatment or conversion at the time that the hazardous

[33] 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.

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

waste was originally received at the qualified management unit (assuming that no previous credit is allowable to the same person for the same waste). This credit (or refund) would be allowed in the same manner as for an overpayment of the tax. If the qualified treatment or conversion is completed before the time for payment of tax, no tax would be imposed on the relevant waste.

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 treatement facilities is defined as a surface impoundment which contains treated wastewater during the secondary or tertiary phase of biological treatment, or which 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 which 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 subsequently 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 would also 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 waste end 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 waste end tax that would (1) raise $286 million per year, and (2) be designed to discourage the disposal of hazardous wastes in an environmentally unsound manner (and to accomplish this with maximum administrative feasibility).

E. S. 955 (Sens. Mitchell and Chafee)—"Superfund Revenue Act of 1985"

Overview

This bill is intended to raise $7.5 billion for the Superfund (not including interest and recoveries) over a five-year period, from the following revenue sources: (1) an extension of the petroleum tax (Code sec. 4611) at a 1.13 cent per barrel rate; (2) an extension of the chemical feedstocks tax (sec. 4661) on the same taxable substances as under present law, but at higher rates that are indexed for inflation (beginning in 1986); (3) a single-rate tax on the treatment, storage, disposal, or export of hazardous waste (also indexed for inflation); and (4) a tax on corporate earnings and profits (as defined by the bill) in excess of $5,000,000 per year. Superfund financing would also include $187.5 million per year of general revenue appropriations.

Petroleum tax

The bill would increase the present law environmental excise tax on petroleum from 0.79 cents per barrel tax to 1.13 cents per barrel, effective from October 1, 1985. This tax would apply through September 30, 1990.

Tax on feedstock chemicals

Tax rates

The bill would impose tax on the same chemical feedstocks that are taxed under current law (sec. 4661). However, tax rates would be set at the lower of 1½ percent of estimated wholesale price or $5.35 per ton, in accordance with the following table (Table 9):

Table 9.—Chemical Tax Rates Under Present Law and Proposed Rates Under S. 955

[Tax rates per ton, before any inflation adjustment]

Substance	Present law	Proposed rates
Organic substances:		
Acetylene	$4.87	$5.35
Benzene	4.87	5.35
Butadiene	4.87	5.35
Butane	4.87	4.87
Butylene	4.87	5.11
Ethylene	4.87	5.35
Methane	3.44	3.44
Napthalene	4.87	5.35
Propylene	4.87	5.35
Toluene	4.87	5.14
Xylene	4.87	5.35
Inorganic substances:		
Ammonia	2.64	2.64
Antimony	4.45	5.35

Table 9.—Chemical Tax Rates Under Present Law and Proposed Rates Under S. 955—Continued

[Tax rates per ton, before any inflation adjustment]

Substance	Present law	Proposed rates
Antimony trioxide	3.75	5.35
Arsenic	4.45	5.35
Arsenic trioxide	3.41	5.35
Barium sulfide	2.30	5.35
Bromine	4.45	5.35
Cadmium	4.45	5.35
Chlorine	2.70	3.03
Chromite	1.52	1.52
Chromium	4.45	5.35
Cobalt	4.45	5.35
Cupric oxide	3.59	5.35
Cupric sulfate	1.87	5.35
Cuprous oxide	3.97	5.35
Hydrochloric acid	0.29	0.93
Hydrogen fluoride	4.23	5.35
Lead oxide	4.14	5.35
Mercury	4.45	5.35
Nickel	4.45	5.35
Nitric acid	0.24	3.03
Phosphorus	4.45	5.35
Potassium dichromate	1.69	5.35
Potassium hydroxide	0.22	5.35
Sodium dichromate	1.87	5.35
Sodium hydroxide	0.28	2.79
Stannic chloride	2.12	5.35
Stannous chloride	2.85	5.35
Sulfuric acid	0.26	0.77
Zinc chloride	2.22	5.35
Zinc sulfate	1.90	5.35

Starting in 1986, the rates specified in the table 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, for the 12-month period ending in September of the preceding year, exceeds the comparable average of the index for the 12-month period 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 September of the preceding

year, exceeds the comparable averages for the 12-month period ending in September 1984.[35]

Effective date

The amendments to the tax on feedstock chemicals would be effective on October 1, 1985.

Termination date

The tax would expire on September 30, 1990.

Tax on hazardous waste

Imposition of tax

The bill would impose a tax on (1) the receipt of hazardous waste at any qualified hazardous waste facility, and (2) the export of hazardous waste.

Hazardous waste subject to the tax would include any waste having the characteristics identified under or listed pursuant to 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.

Qualified hazardous waste facilities would mean any facility (including disposal and other facilities): (1) which qualifies for authorization to operate under section 3005(e) of the SWDA, *or* (2) which has a valid permit under section 3005 of that Act (or a State program authorized by section 3006 of the SWDA).

Tax rates

The tax would be imposed at a flat rate of $3.65 per metric ton (approximately 1.1 English tons) of hazardous waste subject to the tax.

The tax would generally be imposed on the full amount of waste received at a hazardous waste facility. However, in the case of on-site waste water treatment facilities, the taxpayer could elect to have tax imposed on the amount of hazardous waste generated at the site (which excludes non-hazardous materials added to the waste stream prior to treatment).

The tax rate would be adjusted for inflation, beginning in calendar year 1986, by increasing the $3.65 tax rate by the percentage (if any) by which the GNP implicit price deflator for the preceding calendar year exceeds the deflator for calendar year 1984.

Procedure and administration

Liability for tax.—The tax would be imposed on the owner or operator of the qualified hazardous waste facility, or, in the case of export, on the exporter of hazardous waste.

Avoidance of double tax.—The bill specifies that no tax is to be imposed upon the receipt or export of hazardous waste directly from one or more qualified hazardous waste facilities.

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[35] Tax rates would not be reduced below the levels shown in Table 9, even if the producer price index declines.

Effective date

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

Termination date

The tax would terminate on September 30, 1990.

Environmental tax on corporate earnings and profits

Imposition of tax.—The bill would impose an environmental tax equal to .003 (i.e., 0.3 percent) of corporate earnings and profits in excess of $5,000,000 in any taxable year. This tax would be imposed on all corporations other than S corporations, regulated investment companies (RICs), and real estate investment trusts (REITs).

In computing earnings and profits for purposes of the tax, no reduction would be allowed for any distribution made to a shareholder after September 30, 1985, with respect to the corporation's stock. If a corporation has an earnings and profits deficit for any taxable year after the effective date, then such deficit would be used to reduce its earnings and profits (if necessary below zero) for the next taxable year (i.e., perpetual carryforward).

The environmental tax on corporate earnings and profits would be in addition to, and independent of, any other tax. The tax could not be reduced by otherwise available income tax credits.

Effective date.—The tax on corporate earnings and profits would be effective for taxable years ending after September 30, 1985. For taxable years which include October 1, 1985, tax would be imposed on that portion of earnings and profits which is proportional to the number of days in the corporation's taxable year which falls after September 30, 1985.

Termination date.—The tax would not apply to any taxable year ending after September 30, 1990.

Trust fund provisions

The bill would allocate revenues from each of the taxes described above (technically, amounts equivalent to these revenues) to the Superfund, under the appropriate CERCLA provision. In addition, appropriations of $187.5 million per year would be authorized from general revenues, for fiscal years 1986 through 1990.

F. S. 957 (Sens. Bentsen and Wallop)—"Superfund Excise Tax Act of 1985"

Overview

This bill would impose a tax on the sale, lease, or import of tangible personal property by the manufacturer or importer of the property, with revenues from this tax being allocated to the Superfund. No tax would be imposed on manufacturers or importers with less than $100,000 of annual gross receipts from the otherwise taxable sale, lease, or import of tangible personal property. A credit against the tax would be allowed for a proportionate fraction of direct material purchases during the taxable year (i.e., the tax would function similarly to a value added tax). Exports of taxable

property would be exempt, as would sales or imports by tax-exempt entities.

The rate of tax is not specified by the bill. The Secretary of the Treasury is required to determine the tax rate which would raise the amount of revenue necessary to finance the Superfund in any fiscal year.

Imposition of tax

The bill would impose tax on (1) the sale or leasing of tangible personal property in the United States, and (2) the importing of tangible personal property into the United States, by any taxable person in connection with a trade or business. The tax would be imposed upon the manufacturer of tangible personal property (in the case of sale or leasing) or (in the case of imports) on the importer of such property.

For purposes of the tax, "manufacturing" would be defined as activities in which labor or skill is applied by hand or machinery to produce a new, different, or useful substance or acticle of tangible personal property, including activities such as making, fabricating, processing, refining, mixing, and compounding. The bill further specifies that manufacturing is to include the production of raw materials. Manufacturing would not include services incidental to the storage or transportation of property; the incidental preparation of property by a retailer or wholesaler (including routine assemblage); or the production (i.e., growing, harvesting, etc.) of unprocessed agricultural products (except timber) or unprocessed food products.

The tax would be limited to manufacturers or importers with an aggregate taxable amount of $100,000 or more for the relevant taxable period (generally, the taxable year). For purposes of this rule, all members of affiliated groups of corporations (under sec. 1504(a)) would be treated as one taxpayer. Under Treasury regulations, all trades or businesses which are subject to common control (whether or not incorporated) would be treated as a single taxpayer.

Tax rate and taxable amount

The tax would be imposed on the sale price charged by the seller of property to the purchaser thereof, including all items payable to the seller, but excluding the tax imposed under the bill, and any separately stated transportatioh charges. In the case of leases, the tax would be imposed on gross lease payments received during the taxable period. Imports would be taxed according to their customs value plus customs and other duties. If no such value exists, then tax would be imposed on the fair market value. Any taxable amount would be treated as received at the time that the taxpayer would recognize such amount under its general method of accounting.

A credit would be allowed against the tax for purchases of direct materials during any taxable period.[36] This credit would be equal

[36] The bill does not specifically define "direct materials." It appears that the term would include tangible personal property and raw materials used directly to manufacture taxable property and property that otherwise would be taxable for the export exemption. Taxpayers that sell or lease property for export could not include separately stated transportation charges in computing the credit.

to the excess of (1) purchases of direct materials during the taxable period, over (2) the amount of such purchases divided by the sum of 1 plus the applicable rate of tax under the bill, with this excess further being reduced by an amount equal to the tax rate times $100,000. Excess credits under this provision would be treated as overpayments of tax arising on the due date of the relevant return (if later, the date on which the return is actually filed).[37]

The bill does not specify the applicable rate of tax. Tax would be imposed at the rate which the Secretary of the Treasury determines to be necessary to collect a sufficient amount of revenue to finance the Superfund for the fiscal year in question.[38]

Exemptions

No tax would be imposed on any property exported from the United States. Additionally, no tax would be imposed on the sale or importation of property (1) by the United States or any State or political subdivision (including the District of Columbia and U.S. possessions), or any agency or instrumentality thereof, or (2) by any organization that is exempt from Federal income taxation, except to the extent of transactions associated with an unrelated taxable businesses.

As indicated above, no tax would be imposed on persons having an aggregate taxable amount of less than $100,000 for any taxable period.

Procedure and administration

The taxable period for any taxpayer would generally be the taxpayer's taxable year for income tax purposes; if no such year exists, the calendar year would be used. A taxpayer could also elect to use a quarterly taxable period, or any other period allowed by Treasury regulations. The Treasury regulations could further require quarterly deposits of estimated tax for any taxable period. Returns would be due the first day of the second calendar month after the end of any taxable period (e.g., February 1 for a calendar taxpayer year).

Allocation to Superfund

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

Effective date

The tax would be effective for taxable periods beginning after September 30, 1985.

Termination date

The bill does not provide a specific termination date for the manufacturer's tax. However, the Secretary of the Treasury presumably would set a zero rate of tax after Superfund revenue needs were satisfied.

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[37] It appears that the intent of this credit mechanism is to impose tax on value added in the manufacture of tangible personal property in excess of $100,000.

[38] Statements by the sponsors of the bill indicate that the tax rates would be determined legislatively, depending on the overall funding needs of the Superfund and the other taxes included in the funding base. See 130 Cong. Rec. S4410 (statement of Sen. Bentsen), S4412-4413 (statement of Sen. Wallop), April 18, 1985.

VII. ISSUES RELATING TO THE REAUTHORIZATION OF SUPERFUND

A. Funding Level of the Superfund Program

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

The Environmental Protection Agency ("EPA") recently estimated that the Federal cost of remediating all current and future sites on the National Priorities List will total $9.1–14.5 billion in 1983 dollars.[39] EPA's best estimate which incorporates the most likely assumptions and best available data is $11.7 billion. Some have argued that these estimates are too low because of optimistic assumptions concerning the total number of hazardous sites which exist and the proportion of these which will be cleaned up by private parties. The General Accounting Office has reviewed this estimate and concluded that the cost of cleanup could be as high as $26 billion.[40] 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.[41] 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 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.[42]

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[39] 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.

[40] General Accounting Office, *EPA's Preliminary Estimates of Future Hazardous Waste Cleanup Costs are Uncertain, RCED–84–152* (May 7, 1984).

[41] U.S. Congress, Office of Technology Assessment, *Superfund Strategy*, (March 1985).

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

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 triggered off 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 Federal Superfund; through fiscal 1984, appropriations from general revenues have amounted to 12.2 percent of 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 disposal practices and the individuals who currently bear the burden of the feedstock tax. Second, companies who pay to remediate all sites for which they are responsible (whether voluntarily or under court order) are, in effect, taxed twice under the feedstock tax. Third, the current excise tax is assessed on chemical feedstocks rather than on the actual hazardous wastes which are commonly found in abandoned disposal sites. Companies outside of the chemical industry that generated these hazardous wastes are not directly taxed under current law. Even if the disposal of hazardous wastes were taxed, as some have suggested, there would be no direct link between current taxpayers and past waste disposers.

On these grounds, it can be argued that general revenues should finance a larger share of Superfund expenditures. Unlike many of the other trust funds supervised by the Treasury (e.g., the airport and airway, highway, and inland waterway trust funds), the payers of Superfund taxes do not directly benefit from the facilities which

are built and maintained by the Superfund. In Western Europe, general revenue financing is the approach generally followed for funding the remediation of abandoned waste sites.

Advocates of the feedstock tax argue that it is appropriate and equitable to place the financial burden of cleaning up hazardous waste sites on the industries responsible for creating the problem.[43] 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.

In light of the Federal budget deficit, 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 (see below). Such taxes would spread the cost of cleanup broadly over all corporations.

C. Chemical Feedstock Tax

CERCLA imposed an excise tax on 42 chemical feedstocks and on petroleum. The main criterion for determining which feedstocks would be subject to tax was the prevalence of hazardous wastes derived from these feedstocks. The basic feedstock tax rates were set at $4.87/ton for petrochemicals, $4.45/ton for inorganic chemicals, and $0.0079/barrel for petroleum.[44] These rates were necessary to achieve a $1.6 billion Superfund program over five years and to allocate 65 percent of the tax burden to petrochemicals, 20 percent to inorganic chemicals, and 15 percent to petroleum. This allocation was based on the respective proportions of derived wastes found in hazardous waste sites. In addition, the feedstock rates were limited to 2 percent of wholesale price (based on data available in 1980).

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

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[43] 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.

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

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

On the other hand, proponents of the feedstock tax argue that it is successful in accomplishing the stated goal of financing the Superfund program through taxes paid by the industries that account for most of the problem which led Congress to establish the program. According to a report prepared for the EPA, 71 percent of all regulated hazardous wastes are produced by the chemical and petroleum refining industries which are the primary payors of the feedstock tax.[45] Most hazardous wastes or substances are made from the feedstocks subject to tax; the vast majority of those substances ranked highly hazardous at waste sites are taxed feedstocks or their derivatives.

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 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 Unites 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.

While the feedstock tax could, in theory, harm U.S. trade, it is unlikely that the actual damage to the U.S. chemical industry is large. The maximum tax imposed by current law on any chemical is 2.0 percent of the manufacturing cost 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.[46] 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 estab-

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

[46] 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.

lished near low cost sources of natural gas in the Middle East and elsewhere.[47]

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

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 is exempt; however, residual wastes from these processes that enter the environment are subject to tax. Under a waste generation tax, the generation of waste, rather than its disposal, is subject to tax. S. 14 (Senators Moynihan and Bentsen) and S. 886 (Senator Proxmire) are structured generally as disposal taxes, while S. 955 (Senators Mitchell and Chafee) includes a generation-type tax on hazardous waste. The Administration's waste tax proposal 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 disposal tax, like other pollution taxes, is that the market price of disposal does not reflect the full cost to society.

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[47] Data Resources, Inc., *Superfund and the International Competitive Position of the Chemical Industry*, testimony presented to the Subcommittee on Commerce, Transportation, and Tourism of the House Committee on Energy and Commerce, (March 21, 1985).

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 would generally 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 which generate smaller amounts of the more toxic, highly taxed wastes. Second, at the treatment stage, there is an incentive to recycle and otherwise reduce the volume of hazardous wastes which must be disposed. Finally, at the disposal stage, there is an incentive to use safer methods of waste disposal which are taxed at a lower rate. Thus, the tax, administered by the Internal Revenue Service, could supplement the environmental statutes administered by EPA in attempting to achieve environmental goals.

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 which 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, deep well injection would in many cases be taxed at a lower rate than biological waste water 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.

Predictability of revenues

Twenty-three States currently employ or have employed some form of waste-based tax.[48] The General Accounting Office (GAO) recently studied the experience with waste-end taxes in New York, California, and New Hampshire, and concluded that [49]

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

The revenue shortfalls in these States were 39 percent in California, 73 percent in New York, and 93 percent in New Hampshire. Florida replaced its waste-end tax with a feedstock tax in 1983 after discovering that administrative costs exceeded revenues.[50] The State experience with disposal taxes raises the issue that a revenue shortfall might also occur at the Federal level.

Part of the revenue shortfalls experienced at the State level are due to out-of-State disposal of wastes. This type of tax avoidance would not affect a Federal level disposal tax, except to the extent hazardous wastes are exported from the country. A second explanation is that most of the State disposal taxes have been enacted since 1980 and are relatively new. This "learning curve" syndrome may be responsible for the 80-percent revenue shortfall in the Federal disposal tax enacted in the CERCLA of 1980 to fund the Post-closure Liability Trust Fund.[51] A third cause of persistent revenue shortfalls is that the disposal tax creates incentives for waste management, both by legal and illegal means. California, in one year, experienced a 28-percent decline in reported waste, including a 66-percent decline in extremely hazardous wastes, after enacting a waste-end tax.[52] In combination with State level waste end taxes, a Federal disposal tax could raise the effective tax rate on disposal to the point where serious revenue shortfalls might occur at both levels of government.

At the State level, it appears that some of the hazardous waste reduction is due to "midnight" dumping, waste blending, questionable recycling and treatment operations, and under-reporting of waste volumes.[53] Under-reporting is particularly difficult to detect

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[48] Fred C. Hart Associates, Inc. "CERCLA Funding Options," pp. 21–22.
[49] GAO, *State Experiences With Taxes on Generators or Disposers of Hazardous Waste* (May 4, 1984), p. ii.
[50] ICF, Inc. "Briefing on CERCLA Tax Alternatives," prepared for the Environmental Protection Agency, part II, p. 14.
[51] 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 fiscal year budget estimates of $8 million per quarter and projections of $25 million per quarter when the tax was enacted in 1980.
[52] ICF, Inc. "Briefing on CERCLA Tax Alternatives," part II, p. 20.
[53] *Ibid.*, pp. 18–19.

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 waste-end tax because 96 percent of all hazardous waste are disposed of on site.[54] 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 which cause environmental harm and is successful in discouraging such practices, the revenues generated by the tax will decrease. However, the experience with the Superfund program inidcates that the revenue needs for cleaning up old 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-type tax is less likely to result in midnight dumping, and other causes of revenue shortfall, than is a disposal-type tax. Also, tax revenues from a generation-type 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.

Administrative concerns

Some have questioned whether the current RCRA regulatory system is adequate for assesssing, 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.[55] The GAO concluded that current data were inadequate for determining the cause of the revenue shortfalls in the State programs, and the extent to which illegal disposal practices may have increased as a result of taxing hazardous waste.

Another lesson from the State experience is the relative 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.[56] The Internal Revenue Service would be required to develop complex regulations covering the hundreds of substances involved, and specifying the taxation of numerous recycling, treatment, and disposal practices.

Further, it is not clear to what extent the RCRA regulatory system is adequate to provide the framework for the administration of a tax. For example, liability for an excise tax generally depends on the occurrence of a taxable event, but the RCRA system

[54] Westat Study.
[55] ICF, Inc., "Briefing on CERCLA alternatives," p. 26.
[56] Ibid., p. 12.

is geared to the prevention of certain events (i.e., illegal disposals) which are prohibited under that law. It is unclear at what point legal treatment and/or legal disposal would require the payment of a tax. Some proposed versions of a waste disposal tax would distinguish among storage, treatment, and disposal for purposes of defining the taxable event and whether or not the tax ever applied to a given volume of waste. However, the distinctions among these activities under present law are not always clear.

In addition, since RCRA allows approved State programs to administer the Federal requirements, it is unclear to what extent a 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 which define hazardous wastes and various management practices, as indicated in the following statement:

> Industry and environmentalists alike, unhappy with much of what they already see, have challenged numerous regulations and are involved with EPA in lengthy negotiations over the way those regulations should ultimately read. The states, which administer RCRA, are finding their efforts hobbled because promised federal aid has not materialized.[57]

The Congress in 1984 adopted amendments to the RCRA which, *inter alia,* control certain questionable treatment practices under current law and expand the number of generators subject to the statute. If a disposal tax is tied to RCRA statute, the delays and frequent changes and challenges to EPA's regulations could make it difficult for the Internal Revenue Service (IRS) to administer the tax and issue its own regulations.

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 one 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. 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.

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

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

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 do not work for volatile organic wastes, while the Karl Fischer titration procedure is ineffective for testing wastes which contain significant amounts of acids or aldehydes. The regulations would also have to specify the frequency of sampling for continuous waste streams because water content may be variable. For example, in many waste water treatment facilities the diluteness of the waste stream surges after it rains because storm water and hazardous waste share a common sewer system. Finally, the regulations will have to establish certification procedures for dry weight analyses so that Internal Revenue Service ("IRS") agents can audit effectively taxpayers' claims regarding the dry weight of their taxable wastes.

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 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.[58] Thus a tax of $10 dollars 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 which have few, if any, regulations governing the disposal of hazardous waste. In these cases, U.S. manufacturers might shut down production and possibly establish manufacturing operations in other countries with weaker environmental standards. While some would welcome the export of industries which produce large volumes of hazardous wastes, the cost to the U.S. economy in terms of jobs and income must be considered.

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

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.

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 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 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 adequate resources to compensate the victims of even a few releases. This could necessitate a large tax increase or use of general revenues to pay these claims. Second, it is argued that the transfer of liability to the government diminishes the incentive to make these facilities safe over the long run. Under the scrutiny of private insurers (to avoid liability attributable to CERCLA and State tort laws), it is claimed that facility operators would continually strive to increase safety in order to keep premiums low. Little assurance that a future damage is unlikely results from a lack of release during the first five years after closure. Further, because storage facilities do not pay the tax, a storage facility which switched its status to that of a disposal facility just before closure could transfer liability to the Fund without ever having paid the tax. Other such mismatches between the tax and eligibility for

transfer or liability may be possible; for example, a facility with ar interim status permit may be required to pay the disposal tax but if it never receives a final RCRA permit, will never be able tc transfer liability to the fund. In addition, the Post-closure Func does not relieve waste generators and transporters from legal li ability for damages caused by waste 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 anc owners of waste disposal facilities. Non-sudden environmental im pairment 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 pollu tion actually occurs (occurrence basis). Such a policy would not cover any claim filed after the termination by the insurer even i 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 govern ment, it is argued, is capable of fully insuring these risks.[59]

As an alternative to repeal, one possibility is to the limit the li ability of the Post-closure Fund to sites where the owner and oper ator are insolvent or the liability of a private party cannot be es tablished. 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 li ability for damages for medical costs, income losses, pain and suf fering, and other items which would not be compensated by the Su perfund.

G. Natural Resource Damage Claims

Under present law States and the Federal government may be compensated for damages to government-controlled natural re sources, such as parks and wildlife. These damage payments are in addition to actual costs of cleaning up hazardous substances. The 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 pre vent further damage to individuals as well as natural resources Further, it is argued that this provision exposes the Federal gov ernment 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 provi sion is fully implemented, the amount of claims eventually could be much larger. Thus, the Administration viewed it as unwise tc allow these amounts, which do nothing to promote cleanup of haz ardous substances, to be paid from the Fund.

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[59] See Department of the Treasury, *The Adequacy of Private Insurance Protection under Sec tion 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980,* June 1988.

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 resource 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.

H. Broad-base Tax Alternatives

Based on the Office of Technology Assessment Report and other studies indicating the enormous cost of ultimately cleaning all of the nation's serious hazardous waste sites, some have argued that either general revenues or a broadly based tax eventually will be necessary to finance the Superfund. A broad-base tax would likely cause less economic dislocation than an equal revenue tax on chemical feedstocks or hazardous waste disposal, the effects of which are concentrated in the chemicals industry.

The simplest broad-base Superfund tax alternative would be to impose a surtax on the existing income tax. (A corporate income tax surcharge of 10 percent was in effect during 1968 and 1969, and a surcharge of 2.5 percent was in effect in 1970.) However, it is argued that a surtax would be unfair because a number of corporations pay little or no corporate income tax under current law as a result of various tax preferences such as the investment tax credit and accelerated depreciation. Several alternative broad-base corporate income tax bases have been proposed: earnings and profits, net receipts, and manufacturing value added. Since these tax bases are extremely large, a very low tax rate would generate substantial revenue. Also, such taxes likely would produce relatively stable revenue compared to more narrow alternatives such as a tax on hazardous waste.

Tax on earnings and profits

S. 955, introduced by Senators Mitchell and Chafee, would impose an annual tax of 0.3 percent on corporate earnings and profits (before deducting distribuitions) in excess of $5 million. Earnings and profits, as defined in section 312 and in regulations, more closely reflect actual economic income than does taxable income since many tax preferences are disregarded. Another advantage of this proposal is that only a relatively small number of corporations would be liable for this tax (i.e., corporations with earnings and profits greater than $5 million). However, a disadvantage of this tax is that many corporations, including large corporation, do not currently compute earnings and profits on domestic op-

erations on a regular basis. Thus, some additional recordkeeping might be required.

Tax on manufacturing value added

S. 957, introduced by Senators Bentsen and Wallop, would impose tax on valued added in manufacturing by corporations with over $100,000 of gross receipts. The tax would be similar to the value added taxes ("VATs") imposed in many Western European countries, except that it would not apply at the retail (or wholesale) level, and corporations would compute their tax liability using the "subtractive" rather than the "credit" method. Under the subtractive method, taxpayers deduct purchases of materials from sales of taxable commodities in computing their tax liability, rather than having to claim a credit for tax imposed on purchases of materials. Unlike the European-type VATs, the proposed tax does not allow a deduction for depreciation. Thus the tax base includes both preretail sales of manufactured goods and gross income from capital in the manufacturing sector. Consequently, tax is to some extent imposed on both consumption and gross income (i.e., profits plus depreciation) resulting from manufacturing.

One advantage of taxing value added is that, under the General Agreement on Tariffs and Trade ("GATT"), a VAT is regarded as a direct tax which may be rebated on exports and imposed on imports. Such border tax adjustmenets would minimize adverse trade consequences that might arise from Superfund taxes. A tax on manufacturers may also be regarded as an equitable method of financing the Superfund since most hazardous waste generation is associated with manufacturing operations. However, it could be argued that fairness would dictate that exports of manufactured goods not be exempted from Superfund tax because the production of goods for export generates the same amount of hazardous waste as the production of goods for domestic consumption.

A disadvantage of a value added tax is that it will impose additional recordkeeping and compliance costs. Under the manufacturing value added tax, unlike under current law, taxpayers would be required to separately account for (1) sales of manufactured goods, (2) exports, and (3) costs of goods sold attributable to taxable production. Treasury has estimated that implementation of a broad-base (credit method) VAT would cost $700 million per year and require 20,000 additional personnel. While the tax proposed in S. 957 is substantially narrower in scope than the VAT analyzed by the Treasury Department, administrative costs may nevertheless be significant.

Tax on net receipts

S. 596, introduced by Senator Bradley, would impose a tax of .083 percent on the net receipts of corporations with over $50 million of gross receipts. One advantage of taxing net receipts is that taxpayers are already required to compute net receipts for purposes of the corporate income tax so that compliance costs would be very low. Another advantage is that relatively few corporations would be subject to the tax: only about 10,000 corporations have gross receipts in excess of $50 million.

A disadvantage of the proposal is that the effect of the tax would be uneven across firms and industries. Rental and interest income are generally excluded in the calculation of net receipts and thus would be exempt from tax. Also inventory accounting methods differ between manufacturing and other sectors. Since cost of goods sold depends on the method of inventory accounting, the computation of net receipts (i.e. gross receipts minus costs of goods sold) will vary between industries. Some firms, such as utilities, do not maintain inventories. In such cases additional recordkeeping would be required. Further, the inventory regulations provide that the inclusion of certain items in costs of goods sold follows the accounting treatment on the firm's books. Thus, there could be inconsistent tax results under the net receipts tax depending on variations in income tax accounting practices.

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