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CERCLA'S PETROLEUM EXCLUSION: BAD POLICY IN A PROBLEMATIC STATUTE

I. INTRODUCTION

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)¹ is a problematic and poorly drafted statute that contains substantial ambiguity.² This ambiguity has led to significant confusion in the courts and to great disparity in the statute's interpretation in several legal practice areas, including bankruptcy, corporate law, and real estate.³ Judicial interpretation of CERCLA has been stymied due to the dearth of legislative history.⁴ Resulting, no

3. See, e.g., Brian O. Dolan, Comment, Misconceptions of Contractual Indemnification Against CERCLA Liability: Judicial Abrogation of the Freedom to Contract, 42 CATH. U. L. REV. 179, 212 (1992) ("The ambiguity in some sections of CERCLA requires courts to look at CERCLA's legislative history for guidance in interpreting the statute. Since 1990, some federal courts have overcompensated[,] . . . interpreting it to invalidate indemnity agreements"); Michael I. Greenberg & David M. Shaw, Note, To Lend or Not to Lend-That Should Not Be the Question: The Uncertainties of Lender Liability Under CERCLA, 41 DUKE L.J. 1211, 1211 (1992) ("Much of the lenders' uncertainty and confusion arises from the various and often conflicting interpretations of CERCLA's secured creditor exemption'); Melissa A. McGonigal, Comment, Extended Liability Under CERCLA: Easement Holders and the Scope of Control, 87 Nw. U. L. REV. 992, 1012 (1993) ("[A]mbiguity exists as to how far CERCLA liability may extend into the corporate realm and beyond the corporate entity."); Elizabeth A. Wolford, Note, Lender Liability Under CERCLA: Interpreting the Security Interest Exemption Using Common-Law Principles of Lender Liability, 67 NOTRE DAME L. REV. 1161, 1189 (1992) ("Only two circuit courts have considered the issue of whether a secured creditor's activities fall within the scope of the security interest exemption [Bankruptcy court] decisions reflected various interpretations of the [issue].").

4. See, e.g., Lynda J. Oswald & Cindy A. Schipani, CERCLA and the "Erosion" of Traditional Corporate Law Doctrine, 86 NW. U. L. REV. 259, 262 (1992); Lisa Cope, Comment, Who Should Pay Cleanup Costs—The Federal Response to Corporate Successor Liability Under CERCLA, 32 SANTA CLARA L. REV. 539, 545-46, 550 (1992) (stating that because of CER-CLA's hasty conception, Congress failed to address important issues and that courts have filled in missing pieces).

^{1. 42} U.S.C. §§ 9601-9675 (1988 & Supp. III 1991).

^{2.} See, e.g., Brent Nicholson & Todd Zuiderhoek, Lender Liability Dilemma: Fleet Factors History and Aftermath, 38 S.D. L. REV. 22, 28 (1993) ("Unfortunately, because of the statutory ambiguity and less than complete legislative history, the courts have been forced to clarify these issues and thus define the scope of lender liability."); Stanley M. Spracker & James D. Barnette, Lender Liability Under CERCLA, 1990 COLUM. BUS. L. REV. 527, 551 ("Out of CERCLA's ambiguity, the Eleventh Circuit Court of Appeals has presented lenders with a significant challenge."); Paul W. Heiring, Note, Private Cost Recovery Actions Under CERCLA, 69 MINN. L. REV. 1135, 1141 (1985) ("The statutory language is ambiguous, and CERCLA's legislative history provides little guidance.").

doubt, from the last minute nature of the statute's enactment,⁵ the lack of legislative history has forced the courts to guess at Congress's intent or to rely on the anything but "plain language" of the statute.⁶ The consequence is inconsistent holdings in different federal circuits in cases involving similar issues.⁷ Congress has attempted to strengthen the statute in the decade since its passage,⁸ but has done little to aid the judiciary in the areas where problems most frequently arise.

Recently, a puzzling provision in CERCLA known as the petroleum exclusion has been the subject of significant interpretational problems. As with other elements of the statute, litigation over the petroleum exclusion is now beginning to create a new body of federal statutory construction.

Section 101(14) of CERCLA lists the hazardous substances that are covered under the statute. Included on the list are benzene, toluene, xylene, and ethylbenzene,⁹ each of which is an element of petroleum; inexplicably, however, the last clause of this section excludes crude oil and petroleum.¹⁰ Thus, hazardous chemicals that would otherwise fall under the ambit of CERCLA are immune from the statute when combined as petroleum or crude oil. Recent litigation has focused on the scope of the petroleum exclusion. Significantly, there is virtually no legislative history regarding the petroleum exclusion,¹¹ so it has been left to the courts to determine its breadth.

Part II of this Comment provides an overview of CERCLA's legislative history, including the underlying environmental events that prompted the statute's enactment. The legislative record is devoid of a specific discussion of the petroleum exclusion, although some inferences can be made from the legislative hearings and the competing environ-

8. Congress made changes regarding settlements, Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, § 122, 100 Stat. 1613, 1678 (codified as amended at I.R.C. § 9507 (1988) and in scattered sections of 42 U.S.C.); placed a stronger emphasis on enforcement against responsible parties, *id.* §§ 107-109, 100 Stat. at 1628, 1631, 1633; and increased the amount of funding for the program from \$1.6 billion to \$8.2 billion, *id.* § 9507, 100 Stat. at 1772.

10. 42 U.S.C. § 9601(14). For the text of the petroleum exclusion, see infra part IV.A.

^{5.} See Cope, supra note 4, at 545 n.46.

^{6.} See Wilshire Westwood Assocs. v. Atlantic Richfield Corp., 881 F.2d 801, 803-04 (9th Cir. 1989); Southern Pac. Transp. Co. v. California, 790 F. Supp. 983, 984 (C.D. Cal. 1991).

^{7.} See Comment, Development in the Law—Toxic Waste Litigation, 99 HARV. L. REV. 1458, 1513 (1986). Compare United States v. Carolina Transformer Co., 978 F.2d 832, 838 (4th Cir. 1992) (adopting "substantial continuity test" for corporate successor liability) with Louisiana-Pacific Corp. v. Asarco, 909 F.2d 1260, 1266 (9th Cir. 1990) (rejecting "substantial continuity" test for corporate successor liability).

^{9. 42} U.S.C. § 9601(14) (1988); see Wilshire, 881 F.2d at 803.

^{11.} See Wilshire, 881 F.2d at 805.

mental legislation that preceded CERCLA. Part III provides an overview of the statute as adopted, and part IV examines the petroleum exclusion, including judicial treatment and the legislative record. Part IV develops several hypotheses for the possible motivations behind the petroleum exclusion. Part V then suggests that the petroleum exclusion is no longer justified and examines the way in which the exclusion frustrates the policy goals of CERCLA. This Comment argues that the petroleum exclusion may act as a disincentive to the clean up of oil and petroleum spills, resulting in serious public health threats.

II. THE LEGISLATIVE HISTORY OF CERCLA

A. Pre-CERCLA Environmental History

CERCLA may be viewed as the culmination of the environmental law movement, which began gaining momentum in the late 1960s.¹² This movement saw the passage of environmental statutes that included the Clean Air Act,¹³ the Clean Water Act of 1977,¹⁴ and the Resource Conservation and Recovery Act of 1976¹⁵ (RCRA). These statutes deal primarily with tangible pollution—readily observable environmental events with effects that are quantifiable and solutions that are readily at hand. That kind of tangible pollution was the dominating environmental concern of that particular period.¹⁶ The concentration on reducing pollutants in the air and water, however, led to a corresponding increase in waste dumping on land.¹⁷ Landfills proliferated with attendant toxic waste migration and leaks into subsoils¹⁸ and aquifers.¹⁹ Scientists underestimated the problems that would result from land-based waste dis-

16. See Getches, supra note 12, at 388-89. "One three-day episode of industrial air pollution at Donora, Pennsylvania made 5,910 people ill and accounted for 20 deaths. Barry Commoner warned that the Great Lakes were dying and the Cuyahoga River, laden with volatile chemicals, burst into flames." *Id.* (citations omitted).

17. See BRADFORD F. WHITMAN, SUPERFUND LAW AND PRACTICE 4 (1991).

18. Subsoil is "the stratum of weathered material that underlies the surface soil." WEB-STER'S THIRD NEW INTERNATIONAL DICTIONARY 2279 (1976) [hereinafter WEBSTER'S].

^{12.} See David H. Getches, Groundwater Quality Protection: Setting a National Goal for State and Federal Programs, 65 CHI.-KENT L. REV. 387, 389-90 (1989).

^{13.} Pub. L. No. 88-206, 77 Stat. 392 (1963) (codified as amended at 42 U.S.C. §§ 7401-7671q (1988 & Supp. III 1991)).

^{14.} Pub. L. No. 95-217, 91 Stat. 1566 (codified as amended at 33 U.S.C.A. §§ 1251-1387 (West 1986 & Supp. 1993)).

^{15.} Pub. L. No. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C.A. §§ 6901-6992k (West 1983 & Supp. 1993)).

^{19.} An aquifer is a groundwater reservoir, "a bed or stratum of permeable rock, sand, or gravel that yields water to wells or springs." Pamela King, Note, *The Protection of Groundwater and Public Drinking Supplies: Recent Trends in Litigation and Legislation*, 42 VAND. L. REV. 1649, 1654 n.37 (1989).

posal, as early theories relied too much on the power of the earth to cleanse itself.²⁰

The reality of the burgeoning toxic waste problem exploded into the public consciousness in 1978 with the discovery of a forgotten dump site in Niagara Falls, New York, where buried chemicals were found leaking into homes and seeping out of the ground.²¹ Popularly known as Love Canal, this site became the force that would ultimately elevate the issue of hidden toxic wastes to the forefront of the environmental reform movement.²² In the six years prior to CERCLA's passage, the House of Representatives attempted to pass a comprehensive environmental statute to deal with these developing problems of toxic waste.²³ The Senate also made similar attempts over a three-year period, leading to the adoption of CERCLA.²⁴ Underlying these legislative activities was the growing awareness of the seriousness of developing environmental problems.²⁵

Faced with a perceived serious threat to public health, Congress developed a variety of environmental bills. Only four, however, became the precursors to what would ultimately be CERCLA: House of Representatives Bill 85, House of Representatives Bill 7020, Senate Bill 1341, and Senate Bill 1480.²⁶ None of these bills would survive intact; ultimately

24. Id.

25. During congressional debates, Representative Weiss noted that

[T]he Surgeon General has stated:

"... We believe that toxic chemicals are adding to the disease burden of the United States in a significant way."

A report issued just last month by the Library of Congress . . . concluded that enough toxic pollutants have been released to have affected every citizen in the Nation. It is apparent that we are practically drowning in our own toxic wastes.

126 CONG. REC. 26,347 (1980) (statement of Rep. Weiss) (quotation marks added). Similarly, during remarks to the House of Representatives prior to the introduction of H.R. 85, Representative Biaggi called attention to a *New York Times* editorial that noted

[t]he highest price the world pays for its reliance on petroleum may turn out to be the environmental damage caused by oil spills. A new record is almost certain to be set this year for the amount of oil disgorged into the seas through spills, blowouts and tanker collisions. And while the slick spreads, remedial legislation languishes in Congress.

Comprehensive Oil Pollution Liability and Compensation Act: Hearing on H.R. 85 Before the Subcomm. on Water Resources of the House Comm. on Public Works and Transportation, 96th Cong., 1st Sess. 54-55 (1979) [hereinafter H.R. 85 Hearings].

26. 1 ENVIRONMENTAL LAW INST., supra note 23, at xiii.

^{20.} See WHITMAN, supra note 17, at 4.

^{21.} See Getches, supra note 12, at 391.

^{22.} See Andrew Danzo, The Big Sleazy: Love Canal Ten Years Later, WASH. MONTHLY,

Sept. 1988, at 11; Tom Morganthau & Mary Hager, Coping with Toxic Waste, NEWSWEEK, May 19, 1980, at 34.

^{23. 1} ENVIRONMENTAL LAW INST., SUPERFUND: A LEGISLATIVE HISTORY at xiii (Helen C. Needham & Mark Menefee eds., 1982).

the Stafford-Randolph Compromise²⁷ would replace them to become CERCLA.

B. The Competing Bills

CERCLA was adopted on December 11, 1980.²⁸ Each of the competing bills that the House and Senate were working on in the months prior to CERCLA's passage reflected the varying importance placed on different toxins and environmental threats.²⁹ A brief examination of each competing bill will illustrate how the final statute evolved. It is particularly interesting to note that although three of the four competing bills included oil as a targeted substance, CERCLA established an exclusion for oil.

1. House of Representatives Bill 85 (H.R. 85)

House of Representatives Bill 85 was known as the Oil Pollution Liability and Compensation Act,³⁰ and Representative Biaggi introduced it into the House on January 15, 1979.³¹ The Bill was referred to the Committee on Merchant Marine and Fisheries, which in turn referred the Bill to the Subcommittee on Coast Guard and Navigation.³² After committee action, the Bill was reported to the full House of Representatives on May 15, 1979.³³ The reported version of the Bill was then referred to the Committee on Public Works and Transportation, which later referred the Bill to the Committee on Ways and Means, which issued a final version on June 20, 1980.³⁴

The oil and chemical industries mounted significant opposition to H.R. 85 because the Bill imposed liability for clean-up costs.³⁵ Among the provisions was a \$200 million trust fund—derived from oil and chemical industry taxes—to pay for oil spill clean up and removal,³⁶ as well as damages to real or personal property, natural resources, loss of profits or

- 31. H.R. 85 Hearings, supra note 25, at 56-57.
- 32. See 1 ENVIRONMENTAL LAW INST., supra note 23, at xiii.
- 33. See id.

- 35. See 1 ENVIRONMENTAL LAW INST., supra note 23, at xiv.
- 36. H.R. 85, 96th Cong., 1st Sess. § 102 (1979).

^{27.} See infra part II.B.5.

^{28.} See Frank P. Grad, A Legislative History of the Comprehensive Environmental Response, Compensation and Liability ("Superfund") Act of 1980, 8 COLUM. J. ENVTL. L. 1, 35 (1982).

^{29.} H.R. 85, for example, was primarily concerned with oil spills on navigable waters, while the other House bill, H.R. 7020, was more comprehensive, focusing on oil as well as the types of hazardous events typified by the disaster at Love Canal. *See infra* parts II.B.1-.2.

^{30.} H.R. 85, 96th Cong., 1st Sess. (1979).

^{34.} See id. at xiii-xiv; Grad, supra note 28, at 3.

earnings due to destruction, and loss of tax revenues.³⁷ On August 27, 1980, Representative John Breaux proposed substitute provisions that altered the original requirements so as to alleviate oil and chemical industry opposition.³⁸ Ultimately, the House enacted the Breaux substitute provisions on September 19, 1980.³⁹ The Bill was later reported to the Senate, which took no further action.⁴⁰

The final Bill established separate funds to provide for the clean up of oil and hazardous substance spills on navigable waters.⁴¹ These funds were to come from taxes on petroleum and chemical feedstocks.⁴² The Bill also created strict joint and several liability,⁴³ allowing plaintiffs to collect all or part of their damages from any defendant, regardless of degree of fault. This part of the statute created a deep-pockets source for clean-up funding, an element that was ultimately incorporated into CERCLA.⁴⁴

2. House of Representatives Bill 7020 (H.R. 7020)

On April 2, 1980 Representative Florio introduced H.R. 7020, which was called the Hazardous Waste Containment Act, into the House of Representatives.⁴⁵ The Bill was referred to the Committee on Interstate and Foreign Commerce on the same day.⁴⁶ The Committee released the revised version of the Bill on May 16, 1980 and referred it to

- 42. Id. § 103.
- 43. Id. § 104.

44. See 42 U.S.C. § 9607(a) (1988). The statute provides that covered persons-those subject to CERCLA liability-are

(1) the owner and operator of a vessel or a facility,

(2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, . . . and

(4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities . . . shall be liable for—

(A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe . . .

(B) any other necessary costs of response incurred by any other person ...

- (C) damages for injury to, destruction of, or loss of natural resources . . .
- (D) the costs of any health assessment or health effects study

Id.

45. H.R. 7020, 96th Cong., 2d Sess. (1980); see 1 ENVIRONMENTAL LAW INST., supra note 23, at xv.

46. See 1 ENVIRONMENTAL LAW INST., supra note 23, at xv.

^{37.} Id. § 103; Grad, supra note 28, at 3.

^{38. 1} ENVIRONMENTAL LAW INST., supra note 23, at xiv.

^{39.} See 1 id.

^{40.} See 1 id. at xv.

^{41.} H.R. 85, 96th Cong., 1st Sess. §§ 101, 103 (1979).

the House Committee on Ways and Means on May 20, 1980.⁴⁷ The Committee of the Whole subsequently amended the Bill and reported the amended version back to the House.⁴⁸ It was finally enacted on September 23, 1980.⁴⁹

H.R. 7020 authorized governmental response to an actual or threatened dangerous hazardous waste release.⁵⁰ Such hazardous releases, under the language of the Bill, included oil. The Bill established a \$600 million fund that was split between government appropriations and fees on oil, petroleum, chemical feedstocks, and inorganic substances.⁵¹ The Bill's scope was confined to nonoperational hazardous waste sites on land or nonnavigable waters and specifically excluded oil or other pollution of navigable waters.⁵² Notably, it is the only one of the four competing measures to specifically exclude oil from the scope of coverage.

3. Senate Bill 1341 (S. 1341)

On June 14, 1979 Senator Culver introduced S. 1341, the Carter Administration's response to the toxic waste problem.⁵³ The Bill was drafted largely in response to the events at Love Canal.⁵⁴ Senate Bill 1341 authorized the government to respond to oil and hazardous substance pollution of navigable waters.⁵⁵ A \$1.6 billion fund, primarily derived from government appropriations and taxes on oil, chemical feedstocks, and inorganic substances, was to be used to finance response activities.⁵⁶ This Bill also called for owners and operators of polluting entities to be jointly, severally, and strictly liable for the costs of cleaning up pollution damage.⁵⁷

After its introduction the Bill was referred to the Senate Committee on Environment and Public Works. That committee then sent the Bill

52. Id. § 3021; Grad, supra note 28, at 4.

53. S. 1341, 96th Cong., 1st Sess. (1979); see 1 Environmental Law Inst., supra note 23, at xvi.

56. S. 1341, 96th Cong., 1st Sess. § 606 (1979).

57. Id. § 604.

^{47. 1} id. at xv.

^{48. 1} *id*.

^{49. 1} *id.*

^{50.} H.R. 7020, 96th Cong., 2d Sess. § 3041 (1980).

^{51.} Id. § 3051.

^{54.} MARY D. WOROBEC & GIRARD ORDWAY, TOXIC SUBSTANCES CONTROLS GUIDE: FEDERAL REGULATION OF CHEMICALS IN THE ENVIRONMENT 188 (1989); see supra text accompanying notes 21-22.

^{55.} S. 1341, 96th Cong., 1st Sess. § 601 (1979); see 1 ENVIRONMENTAL LAW INST., supra note 23, at xvi.

into subcommittees, where the Bill was compared with S. 1480 and was subsequently allowed to die.⁵⁸

4. Senate Bill 1480 (S. 1480)

Senators Culver and Muskie sponsored S. 1480 on July 11, 1979;⁵⁹ this was the legislation that environmentalists most favored.⁶⁰ This Bill, entitled the Environmental Emergency Response Act,⁶¹ was more sweeping in scope than the other bills Congress was considering, and included liability for personal injury as well as liability for hazardous waste transporters on a joint and several basis.⁶² The Bill established a \$4.1 billion fund, derived from appropriations and taxes on primary petrochemicals, inorganic raw materials, and oil, and covered a wide variety of hazardous substances, including oil.⁶³ Oil, however, was subsequently and inexplicably excluded as a hazardous substance from all versions of S. 1480.⁶⁴

5. The Stafford-Randolph Compromise

November 1980 was a major election year, with the Carter Administration reeling from the effects of inflation⁶⁵ and the Iran Hostage crisis.⁶⁶ The election brought significant changes in the composition of the

61. S. 1480, 96th Cong., 1st Sess. (1979).

62. Id. § 4; see Grad, supra note 28, at 22.

63. S. 1480, 96th Cong., 1st Sess. § 5 (1979); see 1 ENVIRONMENTAL LAW INST., supra note 23, at xvii-xviii.

64. See 1 ENVIRONMENTAL LAW INST., supra note 23, at xvii-xviii; Grad, supra note 28, at 6-8.

65. In the wake of a massive presidential election victory for Ronald Reagan, two-thirds of the voters polled stated that the key to their vote centered on worries about unemployment, inflation, and other economic issues. *The November Surprise*, N.Y. TIMES, Nov. 6, 1980, at A34.

66. In November 1979 Iranian religious fundamentalists took 53 Americans hostage at the American Embassy in Teheran. These hostages were held in captivity for a total of 444 days and the United States seemed helpless to act. The only attempted rescue of the hostages resulted in the deaths of eight American soldiers. Ultimately, the hostages were released as a result of President Carter's executive order issued in the last days of his presidency. The executive order released part of the estimated \$12 billion in Iranian assets frozen at the beginning of the crisis. See Howell Raines, Hostages Hailed at the White House: Reagan Vows "Swift Retribution" for Any New Attack on Diplomats, N.Y. TIMES, Jan. 28, 1981, at A1; Stuart Taylor, Jr., Issue and Debate: Should Reagan Honor Deal with Iran?, N.Y. TIMES, Jan. 31, 1981, at A11.

^{58.} See 1 ENVIRONMENTAL LAW INST., supra note 23, at xvi.

^{59.} S. 1480, 96th Cong., 1st Sess. (1979); see Grad, supra note 28, at 6.

^{60.} See Hazardous and Toxic Waste Disposal: Joint Hearings on S. 1341 and S. 1480 Before the Subcomms. on Environmental Pollution and Resource Protection of the Senate Comm. on Environment and Public Works, 96th Cong., 1st Sess. 356 (1979) (statement on behalf of Environmental Defense Fund and others).

nation's leadership.⁶⁷ After election day the 96th Congress found itself operating essentially as a lame duck, and there was increased pressure to push through legislation that the incoming administration would otherwise ignore.⁶⁸ It was therefore important for Congress to pass a comprehensive environmental law, and competition between similar bills, as well as pressure from special interest groups, threatened to completely derail this effort. Thus, in an attempt to revive the sinking effort, two compromises were introduced in the final days of the session.⁶⁹

On November 18, 1980 Senators Stafford, Mitchell, Randolph, Moynihan, Bradley, Heinz, Burdick, Williams, and Leary proposed an amendment to S. 1480, which was essentially a complete substitute for the original Bill.⁷⁰ This compromise measure included several changes

The tide that has swept the country is unquestionably Republican. The November Surprise, supra note 65, at A34.

68. Shortly after the election, Representatives David Stockman and Jack Kemp, two of President-elect Reagan's closest advisors, issued a memo announcing a "bold" new economic proposal. William Nordhaus, *Economic Affairs: That Stockman/Kemp Proposal*, N.Y. TIMES, Dec. 28, 1980, at C2. The memo proposed a "rollback of Federal social regulations, particularly in the environment, health and safety." *Id.*

69. Grad, supra note 28, at 19; see also WHITMAN, supra note 17, at 13 ("The 96th Congress, at virtually its 'eleventh hour,' passed in haste a compromise bill").

70. The records often reflect the pressure that Congress faced as the session drew to a close. Senator Stafford's introductory statement reveals the concern for finding a compromise measure before the end of the session:

The compromise embodies concessions that I would otherwise not make. But I make the concessions because, even as we discuss the issue in this chamber, more chemical poisons are being released into our environment, threatening the health and well being of present and future generations of Americans.

It remains my view that the need to develop legislation to deal with toxic substances demands the highest priority of the Congress. We have worked on it for two Congresses already, and 80 percent of the public believes legislation is needed.

126 CONG. REC. 30,113 (1980) (statement of Sen. Stafford).

Senator Mitchell also echoed the need for compromise:

[A]s the 96th Congress draws to a close, efforts have been made to delay Senate consideration of S. 1480.

In light of the lateness of the date and the urgent need for a Federal response to the ever-growing problem of toxic wastes, I am pleased to cosponsor a substitute to S. 1480 introduced today by my colleague from Vermont, Senator Stafford.

Mr. President, there are elements of S. 1480 that are not contained in this substitute bill. The provisions we have eliminated were those that generated considerable controversy, resulting in delay of Senate passage of S. 1480. While I supported these provisions, I am willing to accommodate the concerns expressed, in a spirit of compromise . . .

Id. at 30,114 (1980) (statement of Sen. Mitchell).

^{67.} One source noted that

one way to describe the magnitude of Ronald Reagan's victory is: . . . [c]ome January, Ted Kennedy will no longer chair the Senate Judiciary Committee, nor William Proxmire the Banking, Housing and Urban Affairs Committee; and Herman Talmadge, who used to supervise Agriculture, including food stamps, won't be in the Senate at all.

from the original Bill.⁷¹ The compromise, however, was deemed unacceptable, and a week later a second compromise was introduced.⁷²

The Senate adopted the second compromise measure on November 24, 1980.⁷³ Because the compromise bill was a tax measure that must constitutionally originate in the House,⁷⁴ the Senate took the House-approved H.R. 7020, substituted the entirety of S. 1480, and passed the measure.⁷⁵ In remarks to the Senate, Senator Randolph contrasted the Senate measure with the original H.R. 7020 and stated that the House Bill was too narrow because it only dealt with hazardous waste sites.⁷⁶ Referring to H.R. 85, the Senator noted that this Bill also was too narrowly crafted because it focused only on oil spills.⁷⁷ Although the Senate's new measure failed to address oil spills, Senator Randolph rationalized that the new measure provided a broader reach to the general problem of hazardous waste clean up.⁷⁸

The House began considering the Bill on December 3, 1980, and many members of Congress felt that they were presented with a "take it or leave it proposition" because the congressional session would soon be ending.⁷⁹ Ultimately, with time running out, the House passed the Stafford-Randolph Compromise as H.R. 7020, and, with President Carter's signature, the Bill became law on December 11, 1980.⁸⁰

Thus, from inception to enactment, CERCLA was hastily conceived and rushed through the legislative process. Ambiguity, inefficiency, and inefficacy, which might have been resolved in a more deliberative legisla-

^{71.} Among the most significant changes embodied in the initial compromise proposal were the elimination of a federal cause of action, liability for personal injury and property loss, limitation of third-party liability, and the introduction of a third-party defense. The fund—to be applied toward clean up of hazardous sites—was reduced from \$4.1 billion to \$2.7 billion, and the contribution ratio between government and industry was rendered more favorable to industry. 1 ENVIRONMENTAL LAW INST., *supra* note 23, at xix.

^{72.} The most significant changes in the second version of the compromise were the elimination of all third-party compensation—including medical expenses for victims of hazardous substance releases, a \$50 million compensation limit on natural resource damage, and a further clean-up fund reduction from \$2.7 billion to \$1.6 billion, spread over a five-year period. *Id.* at xx.

^{73. 126} CONG. REC. 14,988 (1980).

^{74.} The Constitution provides that "[a]ll bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other bills." U.S. CONST. art. I, \S 7, cl. 1.

^{75. 126} CONG. REC. 15,009 (1980).

^{76.} Grad, supra note 28, at 22.

^{77.} Id.

^{78.} Id.

^{79.} See 1 THE ENVIRONMENTAL LAW INST., supra note 23, at xxi.

^{80. 1} id.

tive process, have been left for judicial resolution, resulting in problems with interpretation that continue to mount.

III. CERCLA: THE FINAL OUTCOME

CERCLA regulates the clean up of hazardous substance releases into any part of the environment, including air, water, and land.⁸¹ It further requires the reporting of hazardous substance releases,⁸² as well as the location of hazardous storage, treatment, and disposal sites.⁸³ The statute also establishes the Superfund, a trust fund to pay for hazardous waste clean up, derived from taxes imposed on oil and chemicals, as well as fines and penalties levied by the Environmental Protection Agency (EPA).⁸⁴

CERCLA's primary goals are evident from the face of the statute. First, the statute seeks to establish a comprehensive governmental response to actual or threatened hazardous substance releases.⁸⁵ The law is predominantly concerned with orphaned facilities—where ownership is undetermined and the site is closed or no longer operating as it once was—and sites owned or operated by persons who do not have the financial resources or who are unwilling to undertake appropriate response action.⁸⁶ Second, the statute establishes a federal fund, primarily financed by taxing private industry, to pay for response⁸⁷ costs that gov-

84. 42 U.S.C. § 9631, repealed by Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613, 1772 (codified at I.R.C. § 9507 (1988)); see WOROBEC & ORDWAY, supra note 54, at 186.

85. WOROBEC & ORDWAY, supra note 54, at 187.

86. Id.

87. Under CERCLA a "response" is defined to mean "remove, removal, remedy, and remedial action; [] all such terms . . . include enforcement activities related thereto." 42 U.S.C. § 9601(25) (footnotes omitted). The statute provides for two different types of responses to hazardous waste releases—removal and remedial actions. A removal action means "the cleanup or removal of released hazardous substances from the environment The term includes . . . security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for" Id. § 9601(23).

Remedial actions are "those actions consistent with permanent remedy taken instead of or in addition to removal actions . . . to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment." *Id.* § 9601(24). Remedial actions most often take the form of containment by use of dikes, trenches, and other means of storage. Also included are methods for neutralization, recycling, or destruction of the hazardous waste. *Id.*

^{81. 42} U.S.C. § 9601(8) (1988); see WOROBEC & ORDWAY, supra note 54, at 185-86.

^{82. 42} U.S.C. § 9603.

^{83.} Angus Macbeth, Superfund: The Comprehensive Environmental Response, Compensation and Liability Act of 1980, in EXPANDING LIABILITY IN ENVIRONMENTAL LAW 3, 4 (1981).

ernmental agencies incur.⁸⁸ The fund also pays for the assessment and restoration costs associated with hazardous release damage to natural resources.⁸⁹ Finally, the statute provides a federal cause of action to recover the costs incurred for responses to releases.⁹⁰ This cause of action extends to any potentially responsible party (PRP). PRPs are broken into four distinct classes: (1) current owners and operators; (2) owners and operators at the time of disposal; (3) generators of the substances; and (4) transporters of the substances.⁹¹

CERCLA is essentially a "deep pockets" measure through which Congress intended to gain access to the financial resources of any company that qualifies as a PRP, regardless of the PRP's degree of responsibility for the release.⁹² The Superfund Amendments and Reauthorization Act of 1986 (SARA),⁹³ which Congress passed in 1986, gave the EPA more control over settlement options with PRPs, established a strict time frame for initiating a clean-up response, required assessment of the threats that individual sites pose to human health, and increased state and public participation in the decision-making process.⁹⁴

Generally speaking, there are four requirements necessary to establish liability under CERCLA: (1) A determination must be made that the site involved is a "facility" under the definition of the statute;⁹⁵ (2) a "release" or "threatened release," as defined by the statute,⁹⁶ must have occurred at the site; (3) the government or a private party must have incurred response costs as a result of the release; and (4) there is a deter-

93. Pub. L. No. 99-499, 100 Stat. 1613 (codified as amended at 22 U.S.C. § 9507 (1988) and in scattered sections of 42 U.S.C.).

94. WOROBEC & ORDWAY, supra note 54, at 186.

(A) any building, structure, installation, equipment, pipe or pipeline . . . well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.

42 U.S.C. § 9601(9).

96. The statutory definition of release includes "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment" 42 U.S.C. § 9601(22). Excluded from the definition of release are releases that only result in exposure to employees solely in the workplace; emissions from motor vehicles and aircraft or pipeline pumping engines; releases of source, byproduct, or special nuclear material; and releases resulting from the normal application of fertilizer. *Id.*

^{88.} See WHITMAN, supra note 17, at 14.

^{89. 42} U.S.C. § 9607(a)(4)(C); see Macbeth, supra note 83, at 4.

^{90. 42} U.S.C. § 9607(c)(3); see Macbeth, supra note 83, at 4.

^{91.} WHITMAN, supra note 17, at 14.

^{92.} Cope, supra note 4, at 542-43.

^{95.} The statute defines a facility as

mination that the defendant is a PRP.⁹⁷ The petroleum exclusion primarily relates to the second prong of this test—the determination that a hazardous substance has been released. Because the statute provides that oil and petroleum are not hazardous substances,⁹⁸ the statute does not cover releases of these substances.

IV. THE MYSTERY OF THE PETROLEUM EXCLUSION

A. Overview of the Petroleum Exclusion

Section 101(14) of CERCLA defines a "hazardous substance" as any substance listed in the regulations that govern the Resource Conservation and Recovery Act of 1976, sections 311 and 307 of the Clean Water Act of 1977, and section 112 of the Clean Air Act.⁹⁹ The statute declares, however, that "[t]he term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance" under other provisions of the statute.¹⁰⁰ This exemption from coverage for releases involving petroleum products has become known as the petroleum exclusion,¹⁰¹ and litigation to determine which substances are excluded has recently become more common.¹⁰²

The difficulty courts face in petroleum exclusion cases is ascertaining Congress's rationale for creating the petroleum exclusion in CER-CLA. Due to the dearth of legislative history on CERCLA in general, and especially regarding the petroleum exclusion, courts have been left with little legislative guidance.¹⁰³ The interpretive problems generally center on the language surrounding the term "fraction."¹⁰⁴ It is not the oil or gasoline itself that is particularly dangerous, but the chemical com-

101. See Cose, 4 F.3d at 700; Wilshire Westwood Assocs. v. Atlantic Richfield Corp., 881 F.2d 801 (9th Cir. 1989); Niecko v. Emro Mktg. Co., 769 F. Supp. 973, 981 (E.D. Mich. 1991).

103. See Wilshire, 881 F.2d at 805-06.

104. Id. at 804. According to the court in United States v. Western Processing Co., "fraction" is simply "a term of art for the products separated or refined from crude oil or petro-

^{97.} Id. § 9607(a); see Cose v. Getty Oil Co., 4 F.3d 700, 703-04 (9th Cir. 1993) (stating elements required for prima facie case under CERCLA).

^{98. 42} U.S.C. § 9601(14).

^{99.} Id.

^{100.} Id.; see also WOROBEC & ORDWAY, supra note 54, at 191-92 (providing concise summary of CERCLA's hazardous substances definition).

^{102.} See, e.g., Cose, 4 F.3d at 700 (holding that crude oil tank bottoms are not "petroleum" and not subject to CERCLA's petroleum exclusion); Wilshire, 881 F.2d at 801 (holding that petroleum exclusion applies to refined and unrefined gasoline); see also Ulvestad v. Chevron U.S.A., Inc., 818 F. Supp. 292 (C.D. Cal. 1993) (holding that California Hazardous Substance Account Act, modeled after Superfund, excludes regulation of refined petroleum); Zands v. Nelson, 797 F. Supp. 805 (S.D. Cal. 1992) (involving claim under Resource Conservation and Recovery Act for leaking underground gasoline storage tanks).

ponents of petroleum. Among petroleum's chemical constituents are benzene, xylene, ethyl-benzene, and toluene.¹⁰⁵ Many of these components are listed separately in the statute as hazardous substances,¹⁰⁶ but as long as the chemicals are part of petroleum or crude oil, or a refined fraction thereof—such as gasoline—courts have excluded them from CERCLA.¹⁰⁷

The exclusion's existence appears counterintuitive because it incompletely addresses the health concerns associated with certain releases of known and otherwise prohibited hazardous chemicals. Moreover, there is no stated reason in the statute or legislative history for its development. The seemingly illogical result of deeming a substance hazardous in its pure form, but not hazardous when mixed with other chemicals to form petroleum, is disturbing because exposure to the chemical results in the same health threat in either form.¹⁰⁸ This twist on logic is even more troubling when the harmful nature of these chemicals is taken into account.¹⁰⁹ The dangerous nature of these chemicals warrant inclusion, not exclusion, in CERCLA.

B. Legislative and Administrative Discussion

One commentator has noted that CERCLA's "legislative history has proven perhaps most useful to determine what Congress did not en-

106. 42 U.S.C. § 9601(14) (1988); Wilshire, 881 F.2d at 804-05.

107. E.g., Wilshire, 881 F.2d at 803.

108. For example, benzene has been associated with the development of leukemia in humans, see NIOSH, supra note 105, and gasoline, of which benzene is a component, has likewise been associated with leukemia, see World Health Org. Int'l Agency for Research on Cancer, Occupational Exposures in Petroleum Refining; Crude Oil and Major Petroleum Fuels, 45 IARC MONOGRAPHS ON THE EVALUATION OF CARCINOGENIC RISKS TO HUMANS 159, 184 (1989) [hereinafter World Health Org.].

109. The National Institute for Occupational Safety and Health (NIOSH) is responsible for periodic updates and recommendations relating to workplace exposure to potentially hazardous substances. See NIOSH, supra note 105. In devising its recommendations, NIOSH examines all known and available scientific information relevant to particular hazards. Id. According to NIOSH, benzene is associated with leukemia, xylene is a known central nervous system depressant and respiratory irritant, and toluene is known to have serious impact on the respiratory system. Id. Additional medical studies have found increased risks of urothelial, lymphatic, colorectal, liver, and pancreatic cancers due to exposure to benzene. See Gunnar Steineck et al., Increased Risk of Urothelial Cancer in Stockholm During 1985-87 After Exposure to Benzene and Exhausts, 45 INT'L J. OF CANCER 1012 (1990); Stephen R. Zoloth et al., Patterns of Mortality Among Commercial Pressmen, 76 J. NAT'L CANCER INST. 1047 (1986).

leum." 761 F. Supp. 713, 722 (W.D. Wash. 1991). Thus, gasoline is perhaps the simplest example of a fraction of petroleum or crude oil.

^{105.} See Wilshire, 881 F.2d at 803. Each of these chemicals may have a substantial effect on human health. See NATIONAL INST. FOR OCCUPATIONAL SAFETY AND HEALTH, NIOSH RECOMMENDATIONS, OCCUPATIONAL SAFETY AND HEALTH STANDARDS (1988), available in LEXIS, Genmed Library, Drugdex File [hereinafter NIOSH].

act rather than what it did enact."¹¹⁰ As to the petroleum exclusion, there is little explicit reference to the issue. Therefore, looking at the circumstances surrounding the statute's passage may provide insight as to Congress's possible intent for providing the exclusion.

1. The last minute compromise

Significantly, CERCLA's final form was not the result of extended congressional planning and discussion. As noted earlier, time was running out on the legislature due to the election of a new president and a substantial turnover in congressional seats.¹¹¹ If any environmental legislation was going to be approved, it had to be done with haste, and that meant compromise. Congress was already looking to the oil industry to subsidize a substantial portion of the Superfund;¹¹² therefore, placing additional burdens or liability on this industry may have proven difficult. Certainly, such a move would have led to prolonged debate since special interest groups could have pressured their respective representatives for protection from the additional burdens or liabilities.¹¹³ But with time running out, Congress could not afford an extended discussion.

Congress, however, did discuss the need for legislation covering oil spills.¹¹⁴ Representative Biaggi was particularly concerned that H.R.

. .

114. In the House debate on the Senate amended version of H.R. 7020, Representative Biaggi noted,

I think the Members of this House can understand the difficulty of my decision and the frustration I feel in the omission of an oilspill title from the bill....

The reasons why there is no oilspill title in this bill are complex. . . .

... No action was taken on the oilspill provisions of H.R. 85. The result is ... a superfund bill that is considerably less than super.

As I see it, H.R. 7020 is not a bad bill—it is just an incomplete one. But it is a first step in addressing a serious problem. It is my earnest hope that we can take the next steps early in the next Congress.

126 CONG. REC. 31,974 (1980) (statement of Rep. Biaggi).

^{110.} WHITMAN, supra note 17, at 13.

^{111.} See Grad, supra note 28, at 1.

^{112.} See id. at 30.

^{113.} In 1977 President Carter stated that "the influence of the oil companies, both in the legislative process, in the Executive Branch of the government as well, in the economic structure of our country, is enormous." *President: 'Potential War Profiteering' in Energy Crisis*, WASH. POST, Oct. 14, 1977, at A8. Among those who lobby for oil interests are high ranking officials of oil producing states. A good example is a plan developed by the Oklahoma state legislature to fly members of the legislature and the governor to Washington, D.C., to lobby Congress and President Reagan on behalf of the oil industry. David Zizzo, *Oklahoma Considers D.C. Airlift*, UPI, Apr. 9, 1986, *available in LEXIS*, News Library, UPI File. The plan included was a call for leaders from other states, including Texas and Louisiana, to join in the "airlift." *Id.* More recently, the oil industry lobby actively sought to defeat a number of bills proposed by the Alaska legislature in the wake of the Exxon Valdez oil spill. *New Spill Bills Aimed at Oil Industry*, UPI, May 9, 1990, *available in LEXIS*, News Library, UPI File.

85's¹¹⁵ elements concerning oil spills were not included in the final measure the Senate passed.¹¹⁶ The fact that H.R. 85 contained a provision covering oil spills indicates that some members of Congress were aware of the problem of oil and petroleum releases—at least those that occurred on a grand scale. In the earlier bills—such as H.R. 85—references to oil releases were specifically directed toward oil spills on navigable waterways.¹¹⁷ These previous references indicate that oil spills were viewed as the primary hazard associated with petroleum releases, and shows a lack of awareness of the type of releases that are now becoming more common.¹¹⁸

The Senate also considered an amendment to S. 1480¹¹⁹ early in the legislative process that would have created a separate fund for payments of claims arising out of oil spills.¹²⁰ Once again, however, the amendment was discarded,¹²¹ and there is little or no discussion as to the reasons underlying its abandonment. It is likely that Congress perceived problems in taxing the oil industry to finance the general fund while holding the same industry financially liable for spills. Congress must have been aware that the oil industry would not have acceded to such a measure without a fight given the opposition mounted by the industry to oil spill legislation in general.¹²² Thus, in a compromise effort to get the bill passed, Congress may have simply developed the petroleum exclusion to avoid pressure from the oil industry's strong lobby.

2. Equity considerations

Another possible reason for the petroleum exclusion may have been Congress's determination that, because the petroleum industry was bearing a major share of Superfund's financing,¹²³ the industry had already

... Money in the fund is to be used, in part, for the restoration, rehabilitation and replacement of natural resources injured or destroyed by oil spills.

Id.

122. See 1 id. at xiv.

. .

^{115.} H.R. 85, 96th Cong., 1st Sess. (1979).

^{116.} Id.

^{117.} See 1 ENVIRONMENTAL LAW INST., supra note 23, at xiv; Grad, supra note 28, at 3.

^{118.} See infra part IV.B.4.

^{119.} S. 1480, 96th Cong., 1st Sess. (1979).

^{120. 126} CONG. REC. 21,377 (1980). Senator Gravel, upon introduction of the amendment, stated,

I am submitting for printing an amendment to S. 1480, the Environmental Emergency Response Act, called the Oil Pollution Liability and Compensation Act of 1980. This provision creates a Federal trust fund for the payment of claims due to oil spills supported by a tax on oil produced or consumed in the United States.

^{121.} See 1 Environmental Law Inst., supra note 23, at 22.

^{123.} See WOROBEC & ORDWAY, supra note 54, at 189; Grad, supra note 28, at 30.

paid its fair share. Thus, in the interest of equity, Congress may have believed that the oil industry should not face additional financial liability.¹²⁴ At the time of CERCLA's passage, there were problems in the Middle East and the Carter Administration was dealing with the final days of the Iran Hostage crisis.¹²⁵ Additionally, the oil markets were in turmoil and there was a perception that the oil industry was reeling from the effects of the turbulent markets.¹²⁶ Thus, Congress may have believed it was unreasonable to place the oil industry in a position in which it would assume potential economic burdens above and beyond the initial CERCLA tax.

Congress may also have been concerned about the impact, or perhaps the perceived impact, on consumers. Costs of increased financial burdens on the oil industry could have been redistributed through increases in gasoline and other petroleum-driven prices—such as products that are petroleum-based (plastics) or that require high amounts of energy to produce. During the period in which the legislation was being considered, Americans had witnessed dramatic increases in gasoline prices and long lines at gas stations.¹²⁷ There was fear that the increasing prices would push an already troubled economy into a deeper recession.¹²⁸ Economists for the Carter Administration estimated that increasing oil prices would result in a loss of 250,000 American jobs by the end of 1980.¹²⁹ Congress undoubtedly had serious and legitimate concerns about the public perception of the legislature placing additional burdens on consumers.

132 CONG. REC. 14,935 (1986) (statement of Sen. Nickles on establishing broad-based tax for financing Superfund instead of relying heavily on industry taxes).

126. See supra note 65 and accompanying text.

127. See What to Expect on the Energy Front, U.S. NEWS & WORLD REP., Dec. 31, 1979, at 62, 63-64.

- 128. Id.
- 129. Id.

^{124.} The notion that the oil industry contributed more than its fair share to Superfund is reflected in statements made during the 1986 hearings on the reauthorization of the Superfund:

[[]S]ome people say that we should tax the groups that are the most responsible for the waste that Superfund is designed to clean up, and as a matter of policy I agree with this. Unfortunately, people have been hoodwinked into believing that the major cause of hazardous waste at our Superfund sites is the petroleum industry. The facts tell a much different story.

We are facing a question of equity. This is not a "polluter pays" financing mechanism. We are forcing an industry that is already suffering immensely to shoulder a societal burden for which it is only partially responsible.

^{125.} See supra note 66 and accompanying text.

3. Oil spills receive coverage in other statutes

An alternative argument for establishing the petroleum exclusion may have been the belief that oil spills were sufficiently addressed in other environmental statutes, including section 311 of the Clean Water Act of 1977.¹³⁰ Under section 311, surface waters of the United States are protected from oil and hazardous substances spills.¹³¹ Given that the competing bills considered prior to CERCLA's passage focused attention on oil spills in navigable waters, it is quite possible that Congress perceived an overlap.¹³² Thus, when confronted with resistance from the petroleum industry, Congress may have been willing to compromise and allow the petroleum exclusion because it believed the problem was addressed elsewhere.

New problems involving leaking underground storage tanks have developed since CERCLA was passed. In 1984 Congress addressed this rapidly expanding concern with amendments to the Resource Conservation and Recovery Act.¹³³ The amendments created new provisions targeted at the management of underground storage tanks (USTs) containing certain substances.¹³⁴ Regulated substances include those designated as hazardous under CERCLA, with the addition of petroleum, crude oil, and fractions thereof.¹³⁵ The new regulations establish stan-

[t]he lack of legislation addressing third-party damages has led to the enactment of several Federal statutes which establish special purpose compensation funds....

The Coast Guard supports the superfund concept, which will repeal the legislation establishing these special purpose funds and provide a single, uniform approach to oil pollution liability and compensation.

Id.

134. See Mary Elizabeth Bosco & Russell V. Randle, Underground Storage Tanks (UST), in ENVIRONMENTAL LAW HANDBOOK 607, 607 (J. Gordon Arbuckle et al. eds., 10th ed. 1989); Walter E. Mugdan & Bruce R. Adler, The 1984 RCRA Amendments: Congress as a Regulatory Agency, 18 LAND USE & ENV'T L. REV. 487, 515 (1987).

135. Mugdan & Adler, supra note 134, at 516.

^{130. 33} U.S.C.A. § 1321 (West 1986 & Supp. 1993); see also Macbeth, supra note 83, at 58 ("One can expect that Superfund will now be the dominant statute for hazardous substance spills, but 311 remains important for oil spills.").

^{131. 33} U.S.C.A. § 1251(a)(1)-(7) (West 1986 & Supp. 1993).

^{132.} Similar to Superfund, section 311 established an emergency fund that can be employed to finance clean-up costs of oil spills and other chemical discharges on navigable waters. WOROBEC & ORDWAY, *supra* note 54, at 140. Some officials have charged that the Clean Water Act is ineffective at addressing the problems of oil pollution damage beyond the clean-up costs. *H.R. 85 Hearings, supra* note 25, at 62. During congressional hearings, Admiral Wayne Caldwell stated that

^{133. 42} U.S.C.A. §§ 6901-6992k (West 1983 & Supp. 1993). In 1986 the Environmental Protection Agency (EPA) released the results of a study targeted toward identifying leaking storage tanks. See Candace C. Gauthier, The Enforcement of Federal Underground Storage Tank Regulations, 20 ENVTL. L. 261, 262 (1990). The study was conducted over a two-year period and found that out of 433 tanks tested for leaks, 35% were found to be leaking. Id.

dards for tank construction, leak detection, and response actions, and set requirements for proof of financial responsibility for potential releases.¹³⁶

RCRA requires hazardous waste generators and transporters, and operators of treatment, storage, and disposal facilities to conform with certain regulatory requirements.¹³⁷ Those requirements include a system of notification and record keeping that ensures that the waste can be tracked over a thirty-year period.¹³⁸ The regulations require notification of the EPA of the existence, type, size, age, and location of USTs, including tanks taken out of service since 1974.¹³⁹ Thus, an argument might be made that CERCLA is unnecessary to address leaking storage tanks. As addressed in Part V, without CERCLA, coverage of these problems is incomplete.

4. Lack of knowledge

Another consideration relating to the overlap of the statutes may have been the state of knowledge in 1980 regarding the types of problems to be expected from various sources of pollution. Love Canal was the first indication that there was a serious threat from buried chemical waste, and much of CERCLA's thrust was designed to meet that threat.¹⁴⁰ The legislative discussion of the need for oil spill legislation focused on the *known threat at that time*—oil spills due to shipping and offshore drilling.¹⁴¹ Those spills constituted a clear and present danger, and the perception was that there was already statutory protection in place to combat that danger.¹⁴²

Modern hazards, however, reflect new problems that the 96th Congress may not have foreseen. Tanks used for gasoline storage are aging; consequently, the number and severity of gasoline spills from ruptured

139. 42 U.S.C. § 6991a(a).

140. See 126 CONG. REC. 26,347 (1980) (comments of Representative Weiss calling Love Canal the most notorious hazardous waste site).

142. See supra note 25 for a discussion of the New York Times editorial concerning the serious dangers that an increasing number of oil spills pose.

^{136.} See Gauthier, supra note 133, at 264-65. In order to show financial responsibility, owners and operators handling more than ten thousand gallons of petroleum in a month must have financial resources of one million dollars. Bosco & Randle, supra note 134, at 632. These funds must be available to pay for corrective action and third-party compensation for bodily injury or property damage. *Id.* Owners of less than ten thousand gallons must show financial resources of \$500,000. *Id.* The financial responsibility may be shown through guarantee or surety bond, insurance policy, trust fund, letter of credit, or other mechanisms as state law dictates. *Id.*

^{137. 42} U.S.C. § 6991 (1988); see WOROBEC & ORDWAY, supra note 54, at 167-68.

^{138. 42} U.S.C. § 6991b(c); see WOROBEC & ORDWAY, supra note 54, at 157.

^{141.} H.R. 85 Hearings, supra note 25, at 53-54 (statement of Representative Biaggi noting enormous damage from massive oil spills involving ships and offshore rigs).

and rotting tanks are increasing.¹⁴³ This problem is most clearly reflected in the kinds of environmental cases that have received recent judicial attention.¹⁴⁴

The scope of the problem is reflected in Representative Downey's remarks in hearings on the reauthorization of Superfund:

In mid-1983, nearly 100,000 gallons of gasoline, from storage tanks belonging to a gasoline station in the Bluebell Lane neighborhood [of North Babylon, New Jersey], leaked into the ground. As a result, the neighborhood has been inundated with fumes containing benzene, toluene, and xylene. These chemicals are dangerously toxic . . .

I requested assistance from the Environmental Protection Agency for the residents on two occasions and was denied both times. The responses I received clearly depicted an Agency bound by legal shackles. The Federal Superfund program explicitly excludes petroleum in its definition of hazardous substances. Therefore, EPA could not provide any assistance to the people of Bluebell Lane.

... [W]hile the precise number of gasoline storage tanks range from 1.2 million up to 10 million, some have suggested that between 20 and 40 percent of all tanks are leaking. Others have estimated that over 100,000 storage tanks are leaking nationwide and that this number could grow to 350,000 in the next five years.¹⁴⁵

144. See, e.g., Ulvestad v. Chevron U.S.A., Inc., 818 F. Supp. 292 (C.D. Cal. 1993) (involving leaking gasoline storage tanks that contaminated plaintiff's property); Zands v. Nelson, 797 F. Supp. 805 (S.D. Cal. 1992) (involving soil and groundwater contamination due to leakage of thousands of gallons of gasoline from underground storage tanks); Lyden Co. v. Citgo Petroleum Corp., No. 1:91CV1967, 1991 U.S. Dist. LEXIS 19,783, at *3 (N.D. Ohio Dec. 15, 1991) (involving leaking gasoline storage tanks that contaminated plaintiff's property).

145. Superfund: Hearings Before the Subcomm. on Commerce, Transportation, and Tourism of the House Comm. on Energy and Commerce, 99th Cong., 1st Sess. 1007 (1985). One article dramatically illustrated the severity of the problem by stating that " '[t]he potential for contamination from [leaking underground gasoline tanks] is not small.' One gallon of gasoline per day leaking into groundwater supply is enough to pollute the water of a 50,000 person community to a level of 100 parts per million." Troubled Waters: Gasoline Leaks Threaten

^{143.} Attorneys for the Department of Justice and the EPA posited that a narrow interpretation of the petroleum exclusion would divert valuable resources away from critical toxic waste sites. Brief for the United States as *Amicus Curiae* in Support of Appellees at 14, Wilshire Westwood Assocs. v. Atlantic Richfield Corp., 881 F.2d 801 (9th Cir. 1989) (No. 88-5708) [hereinafter *Amicus Curiae* Brief]. Yet the "EPA estimates that the number of releases of leaded gasoline from underground storage tanks alone, just at retail motor fuel facilities, may exceed 100,000." *Id.* at 4 n.5. In addition, the EPA estimates that there are nearly 1.4 million underground storage tanks in the United States, with 95% storing petroleum. *Id.*

April 1994]

Thus, Congress may have been unaware of the threat of petroleum leaks into the subsoil and groundwater supplies when it considered the petroleum exclusion, and therefore may have been oblivious to the gravity of harm that would escape CERCLA because of the petroleum exclusion. In light of expanding problems with leaking gasoline storage tanks, it is time to repeal the petroleum exclusion.

C. Judicial Construction

In interpreting the petroleum exclusion, courts generally consider the statute's plain meaning first,¹⁴⁶ and then its legislative history.¹⁴⁷ In relying on the statute's plain meaning, courts have held that the petroleum exclusion applies to refined and unrefined petroleum products, even if certain chemicals that are statutorily designated as hazardous substances have been added to the petroleum.¹⁴⁸ In recent cases the definitions of "petroleum" and "fraction" as used in the petroleum exclusion's language have created the most difficulty for the courts.¹⁴⁹

In looking to CERCLA's legislative history, courts have found that there is little or no information about the exclusion.¹⁵⁰ Thus, the courts have been forced to follow standard rules of statutory interpretation in applying the statute.¹⁵¹ The interpretive problems courts confront attempting to make sense of the ambiguous language are compounded by the highly technical nature of the statute's subject matter. Thus, it is understandable why courts have interpreted the statute in conflicting ways.

149. See, e.g., Cose v. Getty Oil Co., 4 F.3d 700, 708 (9th Cir. 1993) (holding that crude oil tank bottoms do not fall within plain meaning of definition of "fraction" or "petroleum"); Southern Pac. Transp. Co. v. California, 790 F. Supp. 983, 987 (C.D. Cal. 1991) (holding that petroleum exclusion covers all forms of petroleum).

150. See Wilshire, 881 F.2d at 805 (finding "virtually no legislative history contemporaneous with the enactment of CERCLA directly relevant to the scope of the petroleum exclusion").

151. The first step in statutory interpretation is to look to the plain language of the statute. Id. at 803. The next step is to examine the statute's legislative history. Id. at 805. Courts next resort to the interpretation rendered by the administrative agency with oversight responsibility for the statute. Id. at 808.

Most Groundwater Supplies, ENGINEERING NEWS-RECORD, Dec. 8, 1983, at 16 (quoting Jack E. Ravan, former EPA Assistant Administrator for Water).

^{146.} See Wilshire, 881 F.2d at 803.

^{147.} Id. at 805.

^{148.} See id. at 801 (holding that petroleum exclusion applies to refined and unrefined gasoline); Zoufal v. Amoco Oil Co., No. 91-CV-70895-DT, 1993 U.S. Dist. LEXIS 4920, at *1 (E.D. Mich. Mar. 18, 1993) (relying on *Wilshire*); Bunger v. Hartman, 797 F. Supp. 968, 969 (S.D. Fla. 1992) (dismissing plaintiff's claim because hazardous substances discovered on site were derived from petroleum products); *Lyden Co.*, 1991 U.S. Dist. LEXIS 19,783 (citing *Wilshire* and holding that petroleum exclusion applies to refined and unrefined gasoline).

1. Wilshire Westwood Associates v. Atlantic Richfield Corporation: The first judicial interpretation of the petroleum exclusion

The first comprehensive judicial analysis of the petroleum exclusion's scope occurred in *Wilshire Westwood Associates v. Atlantic Richfield Corporation.*¹⁵² The plaintiffs filed suit to recover clean-up costs incurred as a result of leaking underground storage tanks containing gasoline.¹⁵³ The complaint alleged that because the gasoline contained additives including benzene, toluene, xylene, ethyl-benzene, and lead—all listed as hazardous substances under CERCLA—the petroleum exclusion should not bar recovery.¹⁵⁴ The court initially defined the issue as a question of whether the petroleum exclusion included refined gasoline and all of its components and additives.¹⁵⁵ The court primarily relied on the plain meaning of the statute to conclude that the petroleum exclusion "exclude[s] gasoline, even leaded gasoline, from the term 'hazardous substance' for purposes of CERCLA."¹⁵⁶

The plaintiffs, however, argued for recovery on a different theory, relying on the "doctrine of the last antecedent,"¹⁵⁷ a principle of statutory construction that focuses on how words in a sentence are qualified by subsequent words.¹⁵⁸ The plaintiffs focused on the phrase "does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance."¹⁵⁹ The plaintiffs insisted that the limiting words—"which is not otherwise specifically listed"—modify the preceding phrase, "does not include petroleum, including crude oil or any fraction thereof."¹⁶⁰ The plaintiffs contended that the language thus created an exception to the petroleum exclusion.

The court disagreed with the plaintiffs' interpretation.¹⁶¹ The court noted that, under the plaintiffs' interpretation, substances such as lead, as

157. Id.

^{152. 881} F.2d 801 (9th Cir. 1989).

^{153.} Id. at 802.

^{154.} *Id*.

^{155.} Id. at 803.

^{156.} Id. at 804.

^{158.} The doctrine of last antecedents is a rule used in statutory construction that says that relative or qualifying words or phrases are to be applied to the words or phrases immediately preceding, and as not extending to or including other words, phrases, or clauses more remote, unless such extension or inclusion is clearly required by the intent and meaning of the context, or disclosed by an examination of the entire act. BLACK'S LAW DICTIONARY 882 (6th ed. 1990).

^{159.} See Wilshire, 881 F.2d at 804 (quoting 42 U.S.C. § 9601(14) (1988)).

^{160.} Id.

^{161.} Id.

a specifically listed substance, would be excepted from the petroleum exclusion and the plaintiffs could maintain a cause of action.¹⁶² This approach would essentially swallow up the petroleum exclusion.¹⁶³ The court concluded that the limiting language applied only to the term "fraction," and that the plaintiffs' reading extended to language that was too remote and thus was grammatically incorrect.¹⁶⁴

After ruling against the plaintiffs based on the statute's plain meaning, the court then examined the legislative history and agency interpretation of the petroleum exclusion.¹⁶⁵ In examining the legislative history, the court noted that specific references contemporaneous with the passage of CERCLA were lacking.¹⁶⁶ The court then turned its attention to subsequent congressional action when legislators had the opportunity to amend the statute.¹⁶⁷

The court first considered the introduction of H.R. 1881 in 1985, which would have amended CERCLA to repeal the petroleum exclusion.¹⁶⁸ The Bill would have allowed CERCLA to apply to crude oil, petroleum, or any fraction thereof, provided the substance was otherwise listed as hazardous under section 101(14).¹⁶⁹ The Bill never progressed beyond its introduction.¹⁷⁰

The court then considered The Hazardous and Solid Waste Amendments of 1984,¹⁷¹ which added a provision to the Solid Waste Disposal Act (SWDA),¹⁷² providing for regulation of underground storage tanks.¹⁷³ The court accorded weight to Senator Durenberger's comments during the introduction of the amendments, when he stated that "spills of the fuel cannot be cleaned up under the Superfund law because it is a petroleum product."¹⁷⁴ The court also relied on Senator Simpson's comments during the Senate debate on the Superfund Amendments and Reauthorization Act (SARA), the 1986 amendments to CER-CLA, in which he stated that

162. Id. at 805.
163. Id.
164. Id. at 804-05.
165. Id. at 805-10.
166. Id. at 805.
167. Id. at 806.
168. Id. (citing H.R. 1881, 99th Cong., 1st Sess. (1985)).
169. Id.
170. Id.
171. Pub. L. No. 98-616, 98 Stat. 3221 (codified in scattered sections of 42 U.S.C.A.).
172. Pub. L. No. 89-272, 79 Stat. 997 (1965) (codified as amended in scattered sections of
42 U.S.C.A.).
173. See Wilshire, 881 F.2d at 806-08.
174. Id. at 807 (quoting 130 CONG. REC. 52,028, 52,080 (1984)).

"[t]his bill will not diminish the scope of the present petroleum exclusion. That provision . . . excludes from the definition of 'hazardous substances' all types of petroleum, including crude oil, crude oil tank bottoms, refined fractions of crude oil, and tank bottoms of such which are not specifically listed or designated as a hazardous substance under the other subparagraphs of that provision."¹⁷⁵

The court concluded its analysis of the legislative history by noting that while postenactment developments are not as persuasive as contemporaneous history, they are entitled to some weight.¹⁷⁶ Thus, the most compelling evidence for the court was the SWDA amendments, which specifically targeted leaking gasoline and incorporated the unchanged wording of the petroleum exclusion in the SARA amendments.¹⁷⁷ The court viewed this fact as an acknowledgement that Congress intended to exclude gasoline from CERCLA coverage.¹⁷⁸

As the next step in its attempt to deduce Congress's intent, the court analyzed the EPA's administrative interpretation of the exclusion.¹⁷⁹ The court cited, but did not discuss, the content of three EPA memoranda, as well as three pronouncements in the *Federal Register*.¹⁸⁰ The court concluded that the EPA's interpretation of the exclusion was consistent with both the petroleum exclusion's plain meaning and the legislative history, and therefore provided "highly persuasive evidence" that the court's interpretation was correct.¹⁸¹

In sum, the court held that "the petroleum exclusion in CERCLA [applies] to unrefined and refined gasoline even though certain of its indigenous components and certain additives during the refining process have themselves been designated as hazardous substances within the meaning of CERCLA."¹⁸²

2. Subsequent judicial interpretation

Although few cases prior to *Wilshire* raised the issue of the petroleum exclusion, several subsequent cases have explored the exclusion's

^{175.} Id. at 808 (quoting 132 CONG. REC. 14,932 (1986)).

^{176.} Id.

^{177.} Id.

^{178.} Id.

^{179.} Id.

^{180.} Id. at 808 n.8.

^{181.} Id.

^{182.} Id. at 810.

scope. In Zoufal v. Amoco Oil Co.,¹⁸³ as in Wilshire, the plaintiffs sought damages for the cost of cleaning up contamination from leaking underground gasoline storage tanks.¹⁸⁴ The defendants based their defense on the petroleum exclusion, but the plaintiffs contended that the exclusion was inapplicable because substances other than petroleum leaked from the tanks.¹⁸⁵ The plaintiffs noted that the defendants' "additive expert" testified that additives are blended into the company's petroleum products subsequent to the refining process.¹⁸⁶ The expert further testified that some of these additives are hazardous substances under CER-CLA.¹⁸⁷ Therefore, the plaintiffs contended, because hazardous substances that are not indigenous to petroleum were added after refining,¹⁸⁸ the contamination that resulted was not excluded from CERCLA.¹⁸⁹

The court dismissed the complaint, concluding that the petroleum exclusion might be excepted under the plaintiffs' reasoning if the materials in the storage tank constituted waste oil or waste products, but this was not such a case.¹⁹⁰ Instead, the court held that because the tanks were used to store unused, refined gasoline and petroleum products, the defendants were not liable.¹⁹¹ Thus, the exclusion would not have ap-

184. Id. at *3.

185. Id. at *6-7.

- 186. Id. at *8.
- 187. Id.

188. Refining is defined as "the action or process of removing impurities from a crude or impure material." WEBSTER'S, *supra* note 18, at 1908. With petroleum it is the "fractional distillation usually followed by other processing." *Id.*

189. Zoufal, 1993 U.S. Dist. LEXIS 4920, at *8.

190. Id. at *10. Generally, waste oil is oil or petroleum that is "not usable for the ordinary or main purpose of manufacture." WEBSTER'S, *supra* note 188, at 2580.

191. Zoufal, 1993 U.S. Dist. LEXIS 4920, at *10. Generally, hazardous substances listed under CERCLA that are mixed with waste oil are found to be excepted from the petroleum exclusion. See, e.g., United States v. Alcan Aluminum Corp., 964 F.2d 252, 266 (3d Cir. 1992) (affirming district court holding that "a plain reading of the 'exclusionary' provision does not warrant the inclusion of oil which has become contaminated with hazardous substances through use"); Lockhart Chem. Co. v. Moreco Energy Inc., No. 89-CV-40160-FL, 1992 U.S. Dist. LEXIS 19,404, at *12 (E.D. Mich. Feb. 5, 1992) (holding that hazardous substances in waste oil do not fall within petroleum exclusion); Niecko v. Emro Mktg. Co., 769 F. Supp. 973, 981 (E.D. Mich. 1991) (noting that petroleum exclusion does not remove hazardous substances that are added to or mixed with petroleum from scope of CERCLA coverage), aff'd, 973 F.2d 1296 (1992); City of New York v. Exxon Corp., 766 F. Supp. 177, 188 (S.D.N.Y. 1991) (holding that where contaminants are not indigenous to petroleum or present at elevated

^{183.} No. 91-CV-70895-DT, 1993 U.S. Dist. LEXIS 4920 (E.D. Mich. Mar. 18, 1993). The *Zoufal* plaintiffs first acquired an interest in the property by lease in 1972, and they continuously operated a gas station on the property from the inception of the lease through the time the action was filed. *Id.* at *2. In 1981 the plaintiffs purchased the property. *Id.* While removing the underground gasoline storage tanks during a 1989 renovation, they discovered soil contamination. *Id.* at *3. The plaintiffs undertook a clean up of the soil at a cost of just over \$52,000 and filed a cause of action under CERCLA for recovery of the cost. *Id.*

plied if the defendants had added extraneous chemicals—those not naturally occurring in petroleum or the direct result of refining—to the gasoline to create a waste product.¹⁹²

3. Cose v. Getty Oil Co.

Most recently, the question of what constitutes a "fraction"¹⁹³ was examined in *Cose v. Getty Oil Co.*¹⁹⁴ In that case, the plaintiffs brought an action to recover response costs needed to clean subsurface oil waste discovered on property they had purchased from the defendant.¹⁹⁵ The contamination at issue consisted of crude oil tank bottoms,¹⁹⁶ containing several hazardous substances including chrysene—a known carcinogen in relatively high concentrations.¹⁹⁷ The issue before the court was whether the crude oil tank bottoms fell within the petroleum exclusion.¹⁹⁸ To resolve this issue, the court developed a two-part test: (1) Determine whether the substance is a "fraction" of "petroleum";¹⁹⁹ and (2) whether the material was subjected to various refining processes to produce useful products.²⁰⁰

a. is the substance a "fraction" of "petroleum"?

As the starting point of its analysis, the court looked to the ordinary meaning of "fraction" and "petroleum," and relied on the definitions provided in *Wilshire*. In *Wilshire*, "fraction" was defined as "one of sev-

- 193. See supra note 104.
- 194. 4 F.3d 700 (9th Cir. 1993).

195. Id. at 702. The plaintiffs purchased property from the defendants, who had an oil pumping station situated on it. Id. The defendants used the station to transport oil by pipeline from its wells to its refinery. Id. A layer of topsoil concealed waste materials dumped on the property and prevented discovery by reasonable inspection. Id. When the plaintiffs began to develop the property for housing, the waste material was discovered. Id. at 702-03.

196. Id. at 702. During storage in tanks, sedimentary solids settle out of crude oil and collect at the bottom of the tanks. Id. Some water is also mixed with crude oil when it is initially pumped from the ground and, being heavier than oil, this water also settles to the bottom of the tank. Id. This bottom layer of sediment and water is known as "crude oil tank bottoms." Id. These tank bottoms are usually drained from crude oil storage facilities and disposed. The property that the plaintiffs purchased was a facility that defendants used to drain the tank bottoms. Id.

levels, waste oil is included in CERCLA's definition of hazardous substance); Washington v. Time Oil Co., 687 F. Supp. 529, 532 (W.D. Wash. 1988) (holding that petroleum exclusion does not apply to contaminants exceeding amounts that naturally occur during refining and substances not resulting from refining).

^{192.} Zoufal, 1993 U.S. Dist. LEXIS 4920, at *10.

^{197.} Id. at 703.

^{198.} Id. at 705.

^{199.} Id.

^{200.} Id.

eral portions... separable by fractionation and consisting either of mixtures or pure chemical compounds."²⁰¹ Fractionation is the process of separating a chemical compound into its separate components by processes such as distillation or crystallization.²⁰² The *Wilshire* court found petroleum to be defined as

[a]n oily flammable bituminous liquid . . . that is essentially a compound mixture of hydrocarbons of different types with small amounts of other substances . . . that is subjected to various refining processes (a fractional distillation, cracking, catalytic reforming, hydroforming, alkylation, polymerization) for producing useful products (as gasoline, naphtha, kerosene, fuel oils, lubricants, waxes, asphalt, coke, and chemicals)²⁰³

The *Cose* court noted that crude oil tank bottoms are formed and accumulate before the oil reaches the refinery.²⁰⁴ Since these bottoms are not part of the oil at that point, they are not "one of several portions separable by fractionation," "that the definition of the term fraction requires.²⁰⁵ The court also stated that because the tank bottoms are never subjected to the refining process, and are not used "for producing useful products" but are "simply discarded waste,"²⁰⁶ they likewise do not fit the definition of the term petroleum.²⁰⁷ Consequently, the court held that crude oil tank bottoms fail to satisfy either the definition of fraction or petroleum, and therefore the petroleum exclusion does not apply.²⁰⁸

Essentially, the court's position was that crude oil tank bottoms are not fractions simply because they never reach the refinery—the bottoms are simply discarded waste.²⁰⁹ This position, however, does not mean that the tank bottoms can never be "separable by fractionation."²¹⁰ The court failed to specifically address this possibility. Had the court addressed the issue, the court's reasoning would bring tank bottoms under the petroleum exclusion's protection as usable petroleum fractions.²¹¹

211. Id. at 705.

^{201. 881} F.2d at 803 (citing Webster's Third New International Dictionary Unabridged (1981)).

^{202.} WEBSTER's, supra note 18, at 900.

^{203. 881} F.2d at 803.

^{204.} Cose, 4 F.3d at 705.

^{205.} Id. (quoting WEBSTER'S definition of fraction).

^{206.} Id.

^{207.} Id.

^{208.} Id.

^{209.} Id.

^{210.} Theoretically, the crude oil tank bottoms could be recycled with waste materials separated from petroleum materials capable of being refined, a possibility the court only alludes to in its opinion. Id. at 706.

The court implicitly considers this notion, however, by suggesting that tank bottoms might be recycled, which could then bring about a different result.²¹²

Thus, it is the treatment of these materials as waste that serves to justify the court's position. The *Cose* court viewed these materials as waste because they had been discarded with no intent to recover or recycle them.²¹³ Consequently, if these tank bottoms were recovered by the oil company and recycled for the purpose of subjecting the material to fractionation, then the tank bottoms would be viewed as a fraction and the petroleum exclusion could apply. Therefore, the *Cose* court has created a "waste-recyclable" distinction in the analysis of petroleum exclusion cases.

The Cose court compared its decision to that of the court in United States v. Western Processing Co.,²¹⁴ which similarly held that "tank bottom sludge is a contaminated waste product, and not a petroleum fraction, as that term is used in [CERCLA]."²¹⁵ The Cose court noted that Western Processing relied heavily on EPA interpretations of the petroleum exclusion in arriving at the waste-recyclable product distinction.²¹⁶ Using the same reasoning, the Cose court determined that the defendant's crude oil tank bottoms should be characterized as waste and therefore did not fall within the petroleum exclusion.²¹⁷ By creating this "waste versus recyclable" distinction,²¹⁸ the court left open the possibility that collection of tank bottoms for recycling purposes might bring the

216. Cose, 4 F.3d at 706. Notably, the Western Processing court mentioned an EPA Final Rule, published on April 4, 1985, which stated

"[i]f a nondesignated . . . substance is spilled and immediately cleaned up for repackaging, reprocessing, recycling, or reuse, it is not a waste and the spill need not be reported. . . .

However, if the substance is not cleaned up for eventual disposal, it is then a waste (and thus a hazardous substance) which has been released to the environment and must be reported."

Western Processing, 761 F. Supp. at 721 (quoting EPA memorandum). Applying the EPA interpretation, the court in Western Processing held that because the tank bottom material was being transported for disposal, and not for reuse, it was clearly "waste." Id.

217. Cose, 4 F.3d at 706.

218. Id.

^{212.} Id. at 706.

^{213.} Id.

^{214. 761} F. Supp. 713 (W.D. Wash. 1991).

^{215.} Id. at 721. The Cose court noted that there is a factual distinction between the facts in Western Processing and the facts in Cose because the tank bottom material in Western Processing contained sand and rust contaminants which were added separately. Cose, 4 F.3d at 706. In Cose, the tank bottoms only contained substances that were separated from the stored crude oil. Id. at 705 n.5. Nevertheless, the court believed that the Western Processing analysis was relevant. Id.

tank bottoms under the protection of the petroleum exclusion.²¹⁹ Thus, it appears that the court has provided a means for companies to escape liability for petroleum waste provided they develop a means of recycling the waste.

This result is certainly not inconsistent with CERCLA's goal of providing a means for cleaning up hazardous waste releases. This would suggest that it is in the best interest of the petroleum industry to develop a means of recycling waste products, which not only aids the industry in avoiding liability—so long as the petroleum exclusion remains intact but also removes the hazardous material from the environment.

b. has the material been subjected to a refining process, producing a useful product?

The *Cose* court also distinguished "useful products" as falling within the petroleum exclusion.²²⁰ The court found a critical distinction between "leaded tank bottoms—which consist of waste generated from cleaning leaded gasoline storage tanks—and crude oil tank bottoms."²²¹ Leaded tank bottoms receive greater protection, according to the court, because "such substances have been 'subjected to various refining processes' in the production of leaded gasoline. Thus, leaded gasoline is considered a *'useful product'* within the definition of petroleum," and the petroleum exclusion applies to these materials.²²² Crude oil tank bottoms, by contrast, are not useful "petroleum" products or "a fraction thereof" and, as such, do not fall under the protection of the petroleum exclusion.²²³

In developing the "useful product" distinction, the *Cose* court made an independent policy decision unsupported by either CERCLA's express language or the legislative record. There is no indication that such a distinction motivated Congress to adopt the petroleum exclusion. Moreover, even useful products pose serious risks to health and safety, and thus should not be immune from CERCLA. For example, toluene is a useful product, but is nevertheless covered by the statute. The useful product distinction is another example of the way that the ambiguity of CERCLA leads to idiosyncratic statutory interpretation.

^{219.} See id. at 706 n.6 (stating that defendant's argument that tank bottoms may be recyclable is irrelevant since materials were discarded with no attempt to recycle or reuse).

^{220.} Id. at 708. The court implied that one purpose for the petroleum exclusion was to protect products that are considered "useful." Id. The assumption is that these products are useful to society and should not be unduly burdened. Id.

^{221.} Id.

^{222.} Id. (emphasis added) (citation omitted).

^{223.} Id.

c. summary.

The analysis in *Cose* may signal a slight shift in petroleum exclusion cases by formulating a test to determine whether a product is a fraction or petroleum under the statute's definition. The first prong of this analysis depends on whether the substance, such as lead, is mixed with crude oil upon arrival at the refinery, thus becoming a fraction.²²⁴ The second prong is to determine whether the material is "subjected to various refining processes . . . for producing useful products."²²⁵ This prong supports the finding in *Wilshire* that the petroleum exclusion covers both leaded and unleaded gasoline. Even if the substance fails on both prongs, a finding that the material is gathered for recycling in a manner that will ultimately subject the substance to the refining process may preserve the exclusion's protection.

The judicial interpretation of the petroleum exclusion is still in the formative stages and it remains to be seen how other circuits will receive the conclusions of the Ninth Circuit. Based on past experience, however, most courts follow the Ninth Circuit's decisions very closely in this area.

V. TIME TO ABANDON THE PETROLEUM EXCLUSION

A. The Petroleum Exclusion Increases Litigation Costs and Diverts Funds That Are Better Spent on Clean Up

CERCLA aims high, but often misses the mark. CERCLA is a topheavy system that has largely failed as an expeditious means of attacking the toxic waste problem. According to many analysts, the primary problem with CERCLA is that the money allocated for toxic clean-up operations has been squandered instead on the massive expense of CERCLA litigation.²²⁶

... About \$4 billion of the \$20.4 billion spent on Superfund cleanups so far has been consumed solely by lawyers and filing fees.... And the total cleanup bill—with

^{224.} See supra part IV.C.3.a.

^{225.} See supra part IV.C.3.b.

^{226.} See, e.g., Peter Hong & Michele Galen, The Toxic Mess Called Superfund, BUS. WK., May 11, 1992, at 32-33. In criticizing the use of the fund, the writers note that

Superfund has turned into superscandal. After 12 years and \$11 billion spent so far, just 84 of the 1,245 sites on the Superfund high-priority list have been cleaned up....

^{... [}T]he money has been squandered on legal squabbles over who should pay. A recent RAND Corp. study found that from 1986 to 1989, insurers spent \$1.3 billion on Superfund litigation and cleanup—with \$1.2 billion of it going to lawyers. Id. More recently, *Time* noted the waste of funds on litigation:

[[]I]n practice the companies sued by the EPA almost always find ways to distribute the pain, first by suing their own insurance companies, and then by suing any and all entities involved with the site. Companies readily acknowledge that it is worth spending millions of dollars on lawyers to put off spending hundreds of millions of dollars on cleanups.

Contributing to the waste of resources on litigation is the inherent ambiguity in CERCLA's language. This ambiguity tends to invite lawsuits by parties proposing novel statutory interpretations, thereby increasing litigation costs.²²⁷ Because courts must look to sources other than the statute itself to ascertain congressional intent,²²⁸ the litigation process is lengthened, further adding to the costs.

The time has come to revamp CERCLA to allow the statute to do what it was originally intended to do—expedite the clean up of hazardous substances with the responsible parties contributing their share of the costs. To this end, perhaps one of the easiest issues to address is the petroleum exclusion. Repealing the petroleum exclusion would be a significant step toward simplifying the statute, with an attendant reduction in litigation costs.

B. Factors That Necessitated Compromise in 1980 Are No Longer at Issue

The possible considerations that may have resulted in the petroleum exclusion²²⁹ are no longer relevant, and the exclusion can no longer be justified. In 1980 the petroleum exclusion was necessary for compromise;²³⁰ but the problem of getting the legislation passed in a timely manner is no longer a consideration. At the time that Congress enacted CERCLA, the legislation was but a first step in conquering an enormous problem.²³¹ Thus, Congress anticipated that fine tuning, or perhaps wholesale modification, would occur after the statute was enacted. If the primary concern in 1980 was that the bill would not be passed due to the congressional session's imminent conclusion,²³² that is clearly no longer an issue.

Moreover, emerging issues, such as the serious problem of leaking underground gasoline storage tanks, strongly suggest the necessity for

231. 126 Cong. Rec. 31,975 (1980).

hefty litigation costs included—is projected by some to reach \$1 trillion over the next 50 years.

Brice Van Voorst, Toxic Dumps: The Lawyers' Money Pit, TIME, Sept. 13, 1993, at 63-64.

^{227.} An example of this is evident in Southern Pacific Transportation Co. v. California, 790 F. Supp. 983 (C.D. Cal. 1991), in which the court rejected plaintiff's claim that the addition of soil that became mixed with refined gasoline brought the product of the two substances out from under the petroleum exclusion. *Id.* at 986-87.

^{228.} See Wilshire Westwood Assocs. v. Atlantic Richfield Corp., 881 F.2d 801, 805-10 (9th Cir. 1989) (looking to legislative statements at hearing long after CERCLA's passage as well as EPA interpretations).

^{229.} See supra part IV.B.

^{230.} See supra part IV.B.1.

^{232.} See supra part IV.B.1.

repealing the petroleum exclusion. Although Congress can expect pressure from oil industry interests during any action to revise the statute, there is no approaching deadline that would lend undue weight to this pressure, unlike the circumstances that surrounded CERCLA's passage.²³³ In addition, the current administration's support of environmental issues²³⁴ may lend additional support to such a reform.

C. Equitable Factors Are Not Valid and Are Contrary to CERCLA's Goals

Regarding the equitable concern that the oil industry is already paying more than its fair share, the same may be said of the chemical industry—yet that industry receives no exemption. Giving petroleum products preferential status over other chemical products is inequitable. For example, the petroleum industry manufactures benzene as a separate and distinct chemical—a chemical that, in its pure form, is considered to be a hazardous substance under CERCLA.²³⁵ Consequently, if an oil company accidentally spills benzene, liability for clean up would attach under CERCLA's provisions. Under those circumstances, the notion that the oil industry already made a significant contribution does not shield the oil company from having to pay for clean up.

It is illogical that the petroleum industry's substantial contribution to the Superfund should be relevant for petroleum spills and not for other chemical spills since both involve reliance on the same fund to pay cleanup costs. It is also inconsistent with the underlying rationale for taxing the oil and chemical industries. The tax burden is placed on those industries because they have produced many of the substances that find their way into Superfund sites.²³⁶

^{233.} See supra part IV.B.1.

^{234.} The Clinton Administration has attempted to carve out a proenvironment position since the early days of President Clinton's election campaign. See Peter Hong & Dori J. Yang, Tree-Huggers vs. Jobs: It's Not That Simple, BUS. WK., Oct. 19, 1992, at 109. The Administration has fostered that image by allowing Vice President Al Gore to establish himself as the White House's environmental conscience. See Kenneth T. Walsh, A Vice President Who Counts, U.S. NEWS & WORLD REP., July 19, 1993, at 29. Positive steps toward environmental reform by the Clinton Administration include reaching a settlement with the sugar industry to share clean-up costs for agricultural pollution in southern Florida; a plan to reduce emissions of greenhouse gases to 1990 levels; and a 75% reduction of timber cutting in old-growth forests. See A Game of Greener Than Thou, NEWSWEEK, Nov. 1, 1993, at 32.

^{235.} See Wilshire Westwood Assocs. v. Atlantic Richfield Corp., 881 F.2d 801, 803 (9th Cir. 1989) (stating "[i]t is undisputable that benzene . . . [is a] hazardous substance[], having been specifically listed or designated pursuant to several of the statutes set forth in Section 9601(14)(A)-(F).").

^{236. 132} CONG. REC. 14,908 (1986) (statement of Sen. Bentsen during hearings on Superfund reauthorization).

Furthermore, subsequent funding amendments reduced the proportion of petrochemical industry contributions.²³⁷ In the SARA amendments, the fund was increased to nine billion dollars, with less than half coming from taxes on crude oil and chemical feedstocks,²³⁸ compared with the 87.5% the petrochemical industry originally contributed.²³⁹ Even if the equitable concerns were once legitimate, they are no longer justified in light of the reduction of industry contribution and the new problems associated with oil and gas pollution.

Similarly, the fear of the impact on the economy, which may have been a motivating factor in 1980, is no longer an issue. The crisis that affected the oil industry during the 1970s has abated and prices have fallen drastically from those earlier levels.²⁴⁰ In fact, crude oil prices are among the lowest in the history of the oil industry and the country has amassed huge reserves of crude oil.²⁴¹ Thus, to impose liability for pollution, with the risk of somewhat increased prices, should not carry the anticipated dire consequences that confronted Congress in 1980, when the country's focus was on the energy crisis.²⁴²

Still, to repeal the petroleum exclusion is certain to entail compromise, especially given the troubled economy the oil industry is experiencing.²⁴³ While consumers have been enjoying stable prices and reduced fears of shortages, the companies themselves are experiencing significant declines in profits and job losses.²⁴⁴ The real issue is likely to involve a balancing of the relative concerns of the economic impact upon the industry versus the demonstrable, growing health threat and its potential economic impact.

The equity considerations confronting Congress at the time of CER-CLA's enactment no longer weigh in favor of the oil industry. The proper action, therefore, is to remove the petroleum exclusion.

238. Id.

241. Id.

242. See supra part IV.B.2.

243. See Parrish, supra note 240, at D3.

244. Id. The earnings of 300 of the largest oil companies in the United States declined by 37% in 1992, and a half million jobs have been lost in the past decade. Id.

^{237.} See Richard G. Stoll, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), in ENVIRONMENTAL LAW HANDBOOK, supra note 134, at 75, 123.

^{239.} Id.

^{240.} See Michael Parrish, The Oil Crisis: 20 Years Later, L.A. TIMES, Nov. 14, 1993, at D1.

D. The Overlap with Other Environmental Statutes Provides Incomplete Protection of the Environment

The hypothesis that the exclusion is the result of CERCLA's overlap with other statutes²⁴⁵ also fails to justify the petroleum exclusion. Because the Clean Water Act only covers spills on navigable waters,²⁴⁶ it fails to account for an entire class of oil pollution—those releases that do not occur on navigable waters and involve disposal or leaks under and above ground. As discussed, this narrow scope of coverage was probably due to Congress's unfamiliarity with the broad scope of problems associated with varying types of oil and petroleum releases.²⁴⁷

New environmental problems resulting from petroleum releases have become more common in the last few years and are likely to become exacerbated as more storage vessels decay.²⁴⁸ Congress attempted to address these new threats to health and the environment by passing an amendment to RCRA covering underground storage tanks.²⁴⁹ Unfortunately, RCRA cannot adequately cover the entire problem of leaking gasoline storage tanks since, to be truly effective, it requires the complement of CERCLA for environmental enforcement.

CERCLA was intended to operate with RCRA to provide "wraparound" coverage for the hazardous waste problem.²⁵⁰ RCRA was passed in 1976 and established a "cradle-to-grave" program, targeting present and future hazardous waste activities.²⁵¹ CERCLA, by contrast, established a program targeted at regulation of past and present hazardous waste activities.²⁵² Thus, CERCLA and RCRA overlap in the area of present hazardous waste sites, but CERCLA was designed to correct the remedial gaps of RCRA by also establishing a means for targeting abandoned hazardous waste sites.²⁵³

Working together, CERCLA and RCRA establish a truly comprehensive system for regulating hazardous waste,²⁵⁴ except in the case of petroleum and crude oil. For example, there is a gap in the regulation of

^{245.} See supra part IV.B.3.

^{246.} See 33 U.S.C.A. § 1251 (West Supp. 1993).

^{247.} See supra part IV.B.1.

^{248.} See Mugdan & Adler, supra note 134, at 515.

^{249.} See supra part IV.B.3.

^{250.} See Stoll, supra note 237, at 75.

^{251.} David R. Case, Resource Conservation and Recovery Act (RCRA), in ENVIRONMEN-TAL LAW HANDBOOK, supra note 134, at 563, 564.

^{252.} See id.; Stoll, supra note 237, at 93.

^{253.} See King, supra note 19, at 1657.

^{254.} Jonathan M. Peterson, RCRA Enforcement Provisions After the 1984 Amendments, 18 LAND USE & ENV'T L. REV. 527, 529-30 (1987).

gasoline storage tanks because the petroleum exclusion exempts leaks associated with many of these tanks that are not within the reach of RCRA.²⁵⁵ These include tanks abandoned prior to 1974, or even after 1974 if the owners ceased participating in the petroleum marketing industry prior to 1986, the year of the amendments.²⁵⁶ Thus, this group of individuals would not be subject to RCRA's registration and reporting requirements; nor would they be subject to CERCLA as long as the petroleum exclusion remains in effect. In these cases the petroleum exclusion contradicts CERCLA's purpose of complementing RCRA and establishing a comprehensive response mechanism to the problem of hazardous waste.

Because it is in the best interest of public health to ensure that releases of crude oil, petroleum, and fractions thereof are cleaned up promptly and responsibly, the petroleum exclusion should be deleted from section 101(14). The solution is relatively simple in theory, but may be difficult to implement due to the nature of the industry interests at stake and the political power behind the industry. In addition, the loss of the petroleum exclusion will bring additional sites within CERCLA's purview, which will require additional funds. Some sources view this diversion of funds as a substantial reason not to repeal the petroleum exclusion.²⁵⁷ Although RCRA likely covers a significant portion of the leaking tanks, the remainder must ultimately be addressed in some manner—either through new legislation or excising the petroleum exclusion.

Enacting new legislation will take time, and deleting the petroleum exclusion is simply a more efficient means of correcting the problem. Since funds must be appropriated for the clean up of the increasing number of petroleum releases, it is more efficient for Congress to authorize additional funds under CERCLA to meet the need. The hardship on CERCLA resources resulting from the loss of the petroleum exclusion will likely be offset, at least partially, by the savings gained from avoidance of litigation over the exclusion's coverage.

VI. CONCLUSION

The underlying purpose of CERCLA's petroleum exclusion may never be known because of its sparse legislative history. Whatever that

^{255.} As the Department of Justice and the EPA have noted, the underground storage tank amendments to RCRA were "intended to fill, *in part*, the gap in Superfund coverage left by the petroleum exclusion." See Amicus Curiae Brief, supra note 143, at 14 (emphasis added).

^{256.} See WOROBEC & ORDWAY, supra note 54, at 184.

^{257.} The problems associated with leaking gasoline storage tanks are enormous. See supra note 143.

original purpose may have been, it has outlived its usefulness in light of emerging environmental problems. The exclusion forecloses clean-up responses involving oil or petroleum spills at orphaned sites or sites where the owners and operators have insufficient funds to undertake clean up themselves; this directly contradicts CERCLA's aims. Furthermore, the petroleum exclusion is now producing its own body of litigation over the issue of what constitutes a petroleum "fraction," which means more of the resources of Superfund will be diverted toward clarifying the statute's language than to actual clean up. More cases are bound to arise concerning what is included in "crude oil, petroleum, or a fraction thereof," particularly as technology and the content of petroleum products change.²⁵⁸

Even in the absence of new discoveries of the hazards associated with petroleum products, the threat to the environment and to human health is already known to be substantial. Estimates show that citizens of the United States use approximately 110 billion gallons of gasoline annually, with nearly all of the product stored underground prior to use.²⁵⁹ Because most storage tanks have no protection against corrosion, there is significant danger of rupture and release of the gasoline into ground water, thereby posing a long term health threat to those exposed.²⁶⁰

The petroleum exclusion simply creates more needless obstacles to a practical, effective, and efficient response to these hazards. The petro-

259. See World Health Org., supra note 108, at 175.

^{258.} See James R. Cox, Comment, Naturally Occurring Radioactive Materials in the Oilfield: Changing the Norm, 67 TUL. L. REV. 1197 (1993). That article examines the emerging health hazards associated with naturally occurring radioactive material (NORM) produced by oilfield hydrocarbons. These elements carry significant health threats to oilfield workers as well as the general public. *Id.* at 1197-98. NORM has not been subject to governmental regulation or monitoring. *Id.* at 1198.

^{260.} Id. A number of medical studies have demonstrated several serious health threats due to exposure to gasoline. Inhalation of gasoline vapors may produce central nervous system disorders including headache, blurred vision, vertigo, nausea, mental confusion, disorientation, delirium, and coma. Id. at 181. In addition, there are reported cases of fatal intoxication due to cerebral edema and hemorrhage. Id. There is also evidence of toxemia during pregnancy as well as problems with premature births. Id. at 183. Other long-term studies have revealed increased rates of a variety of cancers in gasoline station workers, fuel oil dealers, and motor vehicle mechanics. Id. at 184, 192. See generally S. Mommsen & J. Aagard, Occupational Exposures as Risk Indicator of Male Bladder Carcinoma in a Predominantly Rural Area, 23 ACTA RADIOLOGICA ONCOLOGY 147 (1984) (finding significantly increased risk of bladder cancer from occupational exposure to oil or gasoline); Otto Wong et al., Critical Review of Cancer Epidemiology in Petroleum Industry Employees, with a Quantitative Meta-Analysis by Cancer Site, 15 AM. J. INDUS. MED. 283 (1989) (finding increased risk of leukemia and lymphatic tissue cancer in refinery employees); Naohito Yamaguchi et al., Work-Related Bladder Cancer Risks in Male Japanese Workers, 82 JAPANESE J. CANCER RES. 624 (1991) (finding significant risk for bladder cancer in petroleum workers).

April 1994]

leum exclusion forecloses an important remedy for those suffering from serious potential health consequences resulting from spills of petroleum substances. It is time for Congress to take proper action to strengthen and clarify CERCLA. One significant step in this process is the repeal of the petroleum exclusion.

Roger Armstrong*

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