REFINING CERCLA'S PETROLEUM EXCLUSION

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I. INTRODUCTION

When Congress addressed the creation of a "Superfund" to deal with the cleanup of hazardous waste sites, the topic of pollution caused by the oil and gas industry was one of the concerns discussed. Congress also considered such releases when it amended the Resource, Conservation and Recovery Act (RCRA).[1] Congress eventually established this "Superfund" under the statutory scheme known as the Comprehensive Environmental, Response, Compensation, and Liability Act of 1980 (CERCLA).[2] The legislature excluded petroleum releases from regulation under CERCLA, and this exemption has remained intact through subsequent

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1. 42 U.S.C. § 6901 *et seq.* (1988).

2. *Id.* § 9601 *et seq.*

legislation.[3] However, the exemption has required judicial and administrative interpretation to determine its scope. Congress did not formulate a clear definition of petroleum, and the Congressional Record provides scant legislative history to explain the petroleum exemption. Because of this lack of guidance, the exemption has required extensive judicial and administrative interpretation to determine its meaning. The Environmental Protection Agency (EPA) has attempted to define the scope of the exclusion through policy statements and General Counsel memoranda, and numerous courts have tried to interpret the exclusion. Despite these attempts, there is still no definitive interpretation of the exclusion that could be applied to a broad spectrum of situations involving petroleum contamination. Additionally, recent developments involving RCRA threaten to undermine the exclusion.[4] However inconclusive attempts at interpretation have been for the purposes of broad-based application of the petroleum exclusion, the legislative, judicial, and administrative histories of the exclusion are extremely helpful to those faced with petroleum contamination issues.

This Article discusses the legislative, administrative, and judicial history of CERCLA's petroleum exclusion, as well as developments in other areas of federal environmental law and potential encroachment on the petroleum exclusion. While the EPA and the courts have consistently interpreted the exclusion rather broadly, they have refrained from giving blanket approval to applying the exclusion to every substance remotely connected to petroleum. Given the lack of legislative guidance, both EPA and the courts have, for the most part, done a commendable job interpreting the exclusion.

II. THE SCOPE OF CERCLA'S PETROLEUM EXCLUSION

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3. *Id.* Section 9601(14) excludes from the definition of "hazardous substance":

> petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Id.

4. Most notably, the Toxicity Characteristic Leaching Procedure (TCLP), promulgated in 1990, the Leaking Underground Storage Tank (LUST) rules (42 U.S.C. § 6991), and recent decisions regarding tank bottoms, have the potential to seriously undermine the exclusion.

A. Legislative History

The original rendition of CERCLA was an eleventh hour compromise drawn from three competing bills.[5] The House of Representatives considered two bills: the "Hazardous Waste Containment Act" (H.R. 7020)[6] and the "Oil Pollution Liability and Compensation Act" (H.R. 85).[7] The Senate counterpart was the "Environmental Emergency Response Act" (S. 1480).[8]

H.R. 7020 did not address petroleum contamination. The purpose of the bill was the regulation of inactive sites containing hazardous waste (excluding oil) on land and in non-navigable waters.[9] Such regulation would depend on a regime of reporting, cleanup, and monitoring.[10] The bill specifically excluded application of the proposed Act to oil.[11] The exclusion of oil from H.R. 7020 was due to the concurrent consideration of H.R. 85, which specifically provided for a comprehensive system for the remediation of oil spills.[12]

H.R. 85 provided for the creation of an oil spill "Superfund," to be financed by a fee levied on each barrel of oil refined or received at any terminal in the United States.[13] The bill would impose strict liability on operators and owners of vessels or facilities for damages to or destruction of natural resources, loss of profits or earnings resulting from property or resource loss, and for loss of tax revenue for one year.[14] Under the bill, the owner or operator of the vessel or facility would be strictly liable for all claims up to "reasonable" limits, and the owner of the oil would carry the burden for claims

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5. H.R. 7020, 96th Cong., 2d Sess. (1980); H.R. 85, 96th Cong., 1st Sess. (1979); S. 1480 96th Cong., 1st Sess. (1979).

6. H.R. 7020, 96th Cong., 2d Sess. (1980).

7. H.R. 85, 96th Cong., 1st Sess. (1979).

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

9. Frank Grad, *A Legislative History of the Comprehensive Environmental Response, Compensation and Liability ("Superfund") Act of 1980*, 8 COLUM. J. ENVTL. L. 1, 4 (1982).

10. *Id.*

11. *Id.*

12. *Id.* at 3.

13. *Id.*

14. *See* Grad, *supra* note 9, at 3.

exceeding those limits.[15] The oil owner's portion of the remediation cost would be paid from the fund, its contribution having been made through payments to the fund.[16] The bill was introduced shortly after several oil spill "disasters,"[17] and many members of the House insisted there was an urgent need for such legislation.[18] H.R. 85 received strong support in the House and passed by an overwhelming margin.[19] Both H.R. 7020 and H.R. 85 were sent to the Senate, where H.R. 85 subsequently died.

On the Senate side, the bill eventually passed was S. 1480. In debating the bill, the Senate considered the concerns of the House regarding both the hazardous waste as well as the oil spill provisions. S. 1480 would, as a whole, create "an ambit of liability significantly larger than that under H.R. 7020."[20] Despite its greater scope, it contained no provisions for remediation or liability for petroleum spills. The Senate discussed the coverage of such spills, but ultimately decided against including it in the bill.[21] The Senate did

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15. H.R. REP. NO. 1016, 96th Cong., 1st Sess. 29 (1980), *reprinted in* 1980 U.S.C.C.A.N. 6174.

16. *Id.*

17. 126 CONG. REC. 31,971 (1980). The wreck of the *Argo Merchant* off the coast of Massachusetts threatened that state's billion dollar fishing and tourist industries. Additionally, the *Amoco Cadiz* spilled sixty million gallons of oil onto 125 miles of French coastline, and the IXTOC oil well blew in the Gulf of Mexico.

18. 126 CONG. REC. 31,964 (1980). Mr. Florio noted that many members, including Reps. Breaux, Biaggi, Roberts, Studds, and Snyder, worked very hard to produce the oil title, and found its exclusion to be a deficiency in the legislation ultimately adopted. *See also* remarks by Rep. Broyhill:

> Comprehensive oil spill liability legislation has been considered necessary since the 94th Congress. Without such a provision duplicative and narrow laws and difficulty of recovery under common law theories would continue. Thus, each coastline of the United States is inadequately protected by Federal law from oil spill damage.

Id. at 31,969.

19. *Id.* at 31,978. Grad, *supra* note 9, at 4.

20. Grad, *supra* note 9, at 7.

21. S. REP. NO. 848, 96th Cong., 2d Sess. (1980). Unlike the House, the Senate felt oil spills should be addressed, if at all, in a comprehensive act rather than in separate legislation. The report states:

> In the Federal Water Pollution Control Act of 1972, specifically Section 311, Congress established that spills of oil and hazardous substances were not "completely different problems," but, instead, were so similar that they should be dealt with by coverage under the same provision of law.

not provide any detailed insight for its exclusion of petroleum products,[22] but, in justifying the compromise bill,[23] it noted that H.R. 7020 was too narrow because it dealt only with abandoned waste sites, while H.R. 85, with its specific focus on spills of oil and hazardous substances on navigable waters, was inadequate.[24] The Senate also noted that although the bill did not address oil spills, the compromise sufficiently addressed the broader problems of hazardous waste spills.[25] The Senate passed S. 1480 as an amended version of H.R. 7020, and sent the bill back to the House for concurrence.[26]

Upon the bill's return to the House, the House members agreed to a suspension.[27] Despite the limitation on debate, the bill received harsh criticism. Many members of the House were frustrated at having to choose between the bill as amended by the Senate or no bill at all. Representative Breaux (D-La.) supported H.R. 7020, urging members not to "throw away the product that so many have worked for [sic] so long," and reminding them that the

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> Congress reaffirmed this course of action with the Clean Water Act of 1977. The "Superfund" proposal merely incorporates existing law, in this regard.

Id. at 99.

22. *Id.* at 30-31. The Senate report simply stated:

> [P]etroleum, including crude oil and including fractions of crude oil which are not otherwise specifically listed or designated as hazardous substances under subparagraphs (A) through (F) of the definition, is excluded from the definition of hazardous substance. The reported bill does not cover spills or other releases strictly of oil. It is also important to note that natural gas, liquified natural gas (LNG), and high BTU synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas) are not considered hazardous substances within the purposes of S. 1480.

Id.

23. The compromise bill was technically an amended version of H.R. 7020. In reality it was an entirely new bill. Senator Stafford introduced S. 1480 as an amendment to H.R. 7020, and it was this bill that eventually became the Superfund law. Grad, *supra* note 9, at 21.

24. *Id.* at 22.

25. *Id.*

26. The Senate was required to treat the legislation as if it had originated in the House, since it was in part a revenue measure. The Senate considered H.R. 7020, and voted to strike all language after the enacting clause, inserting S. 1480 in its place. This was the Stafford "amendment" referred to in note 21. Grad, *supra* note 9, at 29.

27. A suspension of the rules limits debate and precludes the addition of amendments to the bill prior to the House vote. *Id.* at 29-30.

Senate had committed themselves to resolving the petroleum question in the next session.[28] Many others opposed the bill, concerned that the last minute rush was not sufficient justification to pass what they believed to be bad legislation.[29] Most members of the House felt, however, that the proposed legislation was better than no action, and the House passed the bill.[30]

In 1986, Congress enacted the Superfund Amendment and Reauthorization Act (SARA).[31] During the debate over SARA, Senator Simpson assured the Senate that the proposed legislation would "not diminish the scope of the present petroleum exclusion," which applied to crude oil, crude oil tank bottoms, refined fractions of crude oil, and tank bottoms not specifically listed or designated as a hazardous substance under that provision.[32] The House was similarly reassured, and with full knowledge of the consequences, both houses reauthorized the exclusion without change.[33]

B. EPA Interpretations

Unlike the legislative history, several public notices and EPA General Counsel memoranda are useful for interpreting the petroleum exclusion. EPA's first attempt at explaining the petroleum exclusion occurred in 1981.

On April 15, 1981, EPA issued an interpretative notice and policy statement regarding the notification requirements of section

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28. 126 CONG. REC. 31,970 (1980). It appears that Rep. Breaux did not agree with the exclusion of provisions for oil spills; rather, he trusted that the deficiency would be remedied in the following congressional session.

29. The remarks of Rep. Moore were typical of such responses:

> I do not believe we ought to vote for legislation in the closing hours, being told this is our last chance and pass bad legislation, hoping we can correct it later. Many a mistake is on the books today that we have lived to regret by that kind of thinking. We are abdicating our responsibility as legislators when we legislate in that fashion.

Id. at 31,974.

30. *Id.* at 31,981. The final vote was 274-94 in favor of passage.

31. 42 U.S.C. §§ 9601-9675 (1988). Despite the fact that SARA has sometimes been sarcastically referred to as RACHEL (Reauthorization Act Characterizing How Everyone is Liable), the petroleum exclusion has remained intact.

32. 132 CONG. REC. S. 14932 (daily ed. Oct. 3, 1986).

33. 132 CONG. REC. H. 9605 (daily ed. Oct. 8, 1986).

103(c) of CERCLA.[34] The notice in part discussed CERCLA's exclusion of petroleum from notification requirements.[35] EPA opined that waste oils, even those exhibiting characteristics of hazardous wastes, are specifically excluded from the definition of hazardous substance, and therefore are not subject to notification requirements.[36] Understandably, this interpretation raised questions as to the limits, or lack thereof, of the petroleum exclusion. It was unclear whether EPA intended to apply the exclusion to petroleum wastes containing natural levels of hazardous constituents or to petroleum products to which hazardous substances had been added.[37] EPA subsequently issued a notice intended to alleviate the confusion, stating that the exclusion applies to "materials such as crude oil, petroleum feedstocks, and refined petroleum products, even if a specifically listed or designated hazardous substance is present in such products."[38] EPA limited the scope of this statement, adding that it did not consider petroleum products to which listed hazardous substances had been added to be within the exclusion.[39] In 1986, EPA further limited its interpretation, stating that, even though not listed as a hazardous substance, waste oil containing listed substances at levels exceeding those normally found in petroleum would be subject to CERCLA liability.[40]

EPA's General Counsel has also found it necessary to comment on the exclusion on several occasions. Confronted with the question of whether the exclusion applies to diesel oil spills, the General Counsel concluded that diesel oil falls under the petroleum exclusion as a fraction of petroleum.[41] The General Counsel noted

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34. 46 Fed. Reg. 22,145 (April 15, 1981). This Act requires notification of facilities "at which hazardous substances . . . are or have been stored, treated, or disposed of . . . unless that facility has RCRA interim status or a RCRA permit." *Id.*

35. *Id.*

36. *Id. See* 42 U.S.C. § 9601(14) (1988) (noting that "[t]he term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance").

37. 50 Fed. Reg. 13,460 (April 4, 1985).

38. *Id.*

39. *Id.*

40. 51 Fed. Reg. 8,206 (March 10, 1986).

41. Memorandum from EPA General Counsel to Dick Whittington, Region VI Administrator, Applicability of CERCLA to Contamination of Ground Water by Diesel Oil, 1 (Dec. 2, 1982) [hereinafter Region VI Memorandum].

that the exemption does not apply to fractions of oil which are, by themselves, hazardous substances. Critics of this interpretation argued that, under this definition, all fractions of petroleum containing hazardous substances would be subject to CERCLA.[42] The General Counsel rejected this argument, reasoning that since some hazardous substances are present in all petroleum products,[43] such a construction would nullify the petroleum exclusion and would be contrary to legislative intent.[44] A petroleum product, however, would *not* be exempt if a hazardous substance were added or mixed with the product after refining, even if the added substance occurs naturally in petroleum.[45]

In 1983, the General Counsel again addressed the petroleum exclusion, this time in response to a regional counsel's conclusion that EPA was authorized to use Superfund monies to respond to gasoline spills despite the petroleum exclusion.[46] The regional counsel interpreted the exemption to apply only to raw gasoline, leading to the erroneous determination that the Fund could be utilized to remediate spills of refined gasoline.[47] Noting that the legislative history does not define "petroleum" or "fractions," the General Counsel relied upon general principles of statutory construction to conclude that the exemption applies to refined gasoline.[48] As in the first memorandum, the General Counsel determined that any other interpretation would render the exclusion meaningless.[49]

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42. *Id.*

43. *Id.* Benzene and Toluene are examples of listed hazardous substances which are naturally present in petroleum products.

44. *Id.*

45. *Id.*

46. Memorandum from EPA General Counsel to Sheldon M. Novick, Region III Counsel, Applicability of the CERCLA Petroleum Exemption to Gasoline Spills (Aug. 12, 1983).

47. *Id.*

48. *Id.* at 2. The General Counsel stated:

> Generally, words in a statute are to be interpreted according to their ordinary, everyday meaning. [citation omitted] . . . . Petroleum is defined . . . as "an oily, liquid solution of hydrocarbons . . . when fractionally distilled it yields paraffin, kerosene, benzene, naphtha, fuel oil, gasoline, etc." [citations omitted] Thus, in its common everyday meaning, gasoline is considered to be a fuel oil fraction.

Id.

Finally, in 1987, the Office of the General Counsel issued its most detailed interpretation to date. In this memorandum, the General Counsel discussed whether used oil contaminated by hazardous substances is excluded from CERCLA response authority and liability.[50] The General Counsel concluded that "petroleum includes hazardous substances normally found in refined petroleum fractions but does not include either hazardous substances found at levels which exceed those normally found in such fractions or substances not normally found in such fractions."[51] The memorandum outlines in detail the legal basis for the interpretation.

First, the General Counsel stated that hazardous substances occurring naturally in petroleum must be included in the term "petroleum" for the exclusion to have meaning.[52] Second, the General Counsel noted that there are hazardous substances which are added or whose levels are increased during the normal oil separation and processing in order to produce petroleum.[53] These hazardous substances are also included in the CERCLA definition of petroleum.[54] Finally, the General Counsel asserted that the CERCLA exclusion could not apply to hazardous substances added or increased in concentration "solely as a result of contamination of the petroleum during use."[55] The General Counsel further stated that the interpretation included "only indigenous, refinery-added hazardous substances," as Congress clearly did not intend to shield hazardous substances simply because they are added to petroleum, intentionally or otherwise.[56] The General Counsel did not intend this assessment to classify all used oil as a CERCLA substance. Indeed, the memorandum specifically noted that this interpretation would not

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49. *Id.* "If one were to interpret the exemption to only apply to raw gasoline, the exemption would become a virtual nullity. An interpretation which emasculates a provision of a statute is not to be preferred." *Id.*

50. Memorandum from EPA General Counsel to J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response, Scope of the CERCLA Petroleum Exclusion Under Sections 101(14) and 104(a)(2) (July 31, 1987).

51. *Id.* at 3.

52. *Id.* at 3-4.

53. *Id.* at 4.

54. *Id.*

55. *Id.*

56. *Id.*

affect a significant number of petroleum releases.[57] Spills and releases of gasoline, including those from leaking underground storage tanks, which "[appear] to be the greatest source of groundwater contamination in the United States," would remain excluded, as would spills of crude oil or refined petroleum.[58] Also, since used oil does not necessarily contain non-indigenous hazardous substances or hazardous substances at levels exceeding the naturally occurring concentrations, not all releases of used oil would be subjected to regulation under CERCLA.[59]

C. Court Decisions

Judicial interpretations of CERCLA's petroleum exclusion have addressed petroleum releases under varied factual circumstances. Numerous district courts have been faced with the subject, and those courts have applied the exclusion as written, using the broad language of the statute to exempt many releases from CERCLA liability. Even in cases where the courts have found liability for releases, their analyses have nonetheless also broadly construed the statute.[60]

In *State of Washington v. Time Oil Company*,[61] the defendant, Time Oil Company, asserted the "innocent landowner" defense under CERCLA.[62] In its analysis, the court addressed the question of whether the substance in question was a hazardous waste. The court concluded that the substance was indeed hazardous, because "some of the contaminants found . . . were in amounts in excess of the amounts that would have occurred in petroleum during the refining process."[63] As a result, the exclusion would not protect the defendant from CERCLA liability under the circumstances.[64]

In 1987, a district court addressed the status of lead additives under the exclusion. In *Wilshire Westwood Associates v. Atlantic*

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57. *Id.* at 6.
58. *Id.* (citing 130 CONG. REC. H11,786-11,802 (daily ed. Dec. 5, 1984)).
59. *Id.*
60. *See, e.g.*, *infra* notes 61-103 and accompanying text.
61. 687 F. Supp. 529 (W.D. Wash. 1988).
62. 42 U.S.C. § 9607(b)(3) (1988).
63. 687 F. Supp. at 532.
64. *Id.*

Richfield Corporation, the court reasoned that hazardous constituents of gasoline must be excluded, because a contrary finding would render the exclusion meaningless.[65] The court concluded, however, that the exclusion did not apply to leaded gasoline since lead was an additive to, rather than a fraction of, petroleum.[66] The court stated that there is "no reason to treat lead differently when it is released as a part of gasoline from when it is released in any other form."[67] The following year, however, the court reconsidered the case. Citing EPA's interpretation, the court dismissed the action concluding that CERCLA's petroleum exclusion included leaded gasoline.[68] This decision was the first case in which a court addressed the petroleum exclusion.

On appeal, the United States Court of Appeal for the Ninth Circuit performed a detailed analysis of the statutory language, legislative history, and agency interpretation of the petroleum exclusion.[69] After its examination of the statute, the court determined that the standards governing statutory construction required the court to exclude leaded gasoline from the term "hazardous substance" for CERCLA liability purposes.[70] The plaintiffs, Wilshire Westwood & Associates and Platt Development Company, argued that the court should consider leaded gasoline to be hazardous since coal tar and water-based paint were considered hazardous due to constituents which were also found in the gasoline.[71] The court rejected this argument, stating that there was no analogous exclusion for coal tar or water-based paint.[72] The court also stated the now familiar justification that to find otherwise would be to nullify the exclusion.[73]

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65. No. CV 87-2210-RMT (JRX), 1987 WL 49256, at *1 (C.D. Cal. Oct. 15, 1987)(not reported in F. Supp.), *reconsidered and dismissed*, No. CV 87-2210-RMT (JRX), 1988 WL 119237 (C.D. Cal. Jan. 28, 1980)(not reported in F. Supp.), *aff'd*, 881 F.2d 801 (9th Cir. 1989).

66. 1987 WL 49256, at *1.

67. *Id.*

68. 1988 WL 119237, at *1 (not reported in F. Supp.).

69. 881 F.2d at 803-810.

70. *Id.* at 804.

71. *Id.* at 805.

72. *Id.*

73. *Id.*

After a similarly detailed discussion of the legislative history, the court determined that the unchanged wording of the petroleum exclusion, combined with Congress' discussions during the RCRA amendments, supported the conclusion that the legislature intended such a broad exclusion.[74] Finally, the court afforded deference to the EPA's construction of the exclusion, noting that Congress intended the EPA to have substantial latitude in administering CERCLA.[75] The court declared that the EPA was entitled to such deference in the present case in part because of the scarcity of legislative history, and also because its interpretations have been consistent and thorough.[76] In the end, the Ninth Circuit affirmed the district court's conclusion that leaded gasoline was excluded from CERCLA liability.[77]

In *City of New York v. Exxon Corp.*,[78] one of the defendants, Alcan, asserted a defense heretofore unique to the petroleum exclusion issue. In *Exxon*, New York City commenced a CERCLA action against fifteen corporate defendants, alleging illegal disposal of industrial and chemical waste at city landfills.[79] Alcan's participation was limited to its alleged disposal of a waste oil emulsion containing cadmium, chromium, and lead, all of which are listed hazardous substances.[80] Alcan raised the petroleum exclusion as a defense, claiming that the concentrations of cadmium, chromium, and lead present in the emulsion were less than the concentrations of those substances found in virgin oil.[81] Alcan argued that hazardous

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74. *Id.* at 808. The effect of the RCRA amendments on the CERCLA petroleum exclusion is discussed *infra* at section III.

75. *Id.* at 809.

76. *Id.* at 810.

77. *Id.*

78. 744 F. Supp. 474 (S.D.N.Y. 1990), *affirmed on reconsideration*, 766 F. Supp. 177 (S.D.N.Y. 1991), *reversed and remanded on other grounds*, 964 F.2d 252 (3rd Cir. 1992).

79. *Id.*

80. *Id.* at 478.

81. *Id.* at 489. A somewhat humorous development in this case occurred when the defense had the government's brief analyzed by a lab. According to the defense, the analysis showed that the brief submitted by the government contained levels of the substances in question higher than that found in Alcan's emulsion. The analysis showed that the brief contained more than twice the amount of lead and chromium than Alcan's emulsion, as well as twenty-five times more zinc, twenty times more mercury, eight times more copper, and detectable levels of arsenic. 5 TXLR 973 (Jan. 9, 1991). In a motion for reconsideration, Alcan used a similar argument, contending that the emulsion was less hazardous than the

substances in the emulsion must be present in a certain amount or concentration for CERCLA liability to attach.[82] The court noted that the presence of lead, chromium, and cadmium were the result of Alcan's industrial process, rather than the refining process,[83] and therefore Alcan would be liable under CERCLA regardless of the levels of substances present in the emulsion. Citing a prior interpretation by EPA, the court held that "Congress did not intend to exclude waste oils such as Alcan's, which are by no means strictly 'crude oil or any fraction thereof,'" thereby precluding the operation of the petroleum exclusion.[84] On reconsideration, the court questioned the method Alcan used to determine that the emulsion contained hazardous constituents at levels lower than that found in virgin oil.[85] Alcan's method and results were found to be irrelevant, however, as the court concluded that the simple fact that the levels of hazardous constituents increased during use was sufficient to preclude the application of the petroleum exclusion.[86]

In its brief on appeal, Alcan claimed that allowing the district court ruling to stand would result in imposing liability upon almost anyone disposing of any type of waste.[87] To support this contention, the brief noted that the level of zinc found in eight ounces of the emulsion in question was the same as the level of zinc found in eight ounces of milk.[88] The United States Court of Appeals for the Third Circuit rejected Alcan's arguments and agreed with the district court's interpretation of the petroleum exclusion, finding it to be in harmony with EPA interpretations, but reversed and remanded the case on other grounds.[89] The court cited EPA's distinction between naturally occurring hazardous constituents and substances added through use,

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paper on which the court's decision was written. 5 TXLR 1415 (Apr. 10, 1991). The court was not impressed, finding the analysis to be irrelevant.

82. 5 TXLR 1415 (Apr. 10, 1991).

83. City of New York v. Exxon Corp., 744 F. Supp. 474, 489 (S.D.N.Y. 1990), *aff'd on reconsideration*, 766 F. Supp. 177 (S.D.N.Y. 1991), *rev'd and remanded on other grounds*, 964 F.2d 252 (3rd Cir. 1992).

84. *Id.* at 490 (citing EPA General Counsel Memorandum, *supra* note 46).

85. New York v. Exxon, 766 F. Supp. at 187.

86. *Id.* at 188.

87. 6 TXLR 338 (Aug. 14, 1991).

88. *Id.*

89. City of New York v. Exxon Corp., 964 F.2d 266-67 (3rd Cir. 1992).

holding that Alcan effectively conceded that its emulsion was not excluded when it admitted that the process used adds hazardous substances to the emulsion.[90]

The EPA found further support for one of its interpretations in *Equitable Life Assurance Society of the United States v. Greyhound Corporation*.[91] In *Greyhound*, property previously leased by Greyhound was found to be contaminated with diesel fuel, possibly from leaking underground storage tanks.[92] The plaintiffs commenced a CERCLA action against Greyhound to recover the costs of the clean-up.[93] In a very brief opinion, the court called the plaintiff's reading of the statute "tortured," finding it to be contrary to the EPA's interpretation which specifically found diesel oil to be excluded from cleanup liability.[94]

In *Southern Pacific Transportation Co. v. California (CALTRANS)*,[95] the court considered the applicability of the petroleum exclusion to soil mixed with petroleum which was deposited on the plaintiff's property. After reviewing both the statutory and case law, the court concluded that CERCLA operated to exclude the contaminated soil from CERCLA liability.[96] The court's reasoning reinforced previous judicial and administrative interpretations of the exclusion. First, the court determined that the petroleum exclusion encompassed CERCLA-listed hazardous substances indigenous to petroleum or added during the refining process.[97] Second, the court disposed of the plaintiff's contention that the Clean Air Act (CAA) Amendments of 1990[98] altered the scope of the petroleum exclusion, since the CAA designated benzene as a hazardous air pollutant.[99] The court stated that the argument

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90. *Id.* at 267.

91. 1990 WL 6143 (E.D. Pa. Jan. 26, 1990) (not reported in F. Supp.).

92. *Id.* at *1.

93. *Id.*

94. *Id.* (citing Region VI Memo, *supra* note 41).

95. 790 F. Supp. 983 (C.D. Ca. 1991).

96. *Id.* at 987.

97. *Id.* at 984.

98. Clean Air Act Amendments of 1990, 42 U.S.C. §§ 7401-7671q (Supp. III 1991).

99. *Southern Pacific*, 790 F. Supp. at 985. CERCLA § 101(14) includes in the definition of hazardous waste "any hazardous air pollutant listed under section 112 of the

"rings hollow" and was simply a "novel reincarnation" of the arguments previously rejected in *Wilshire Westwood*.[100] Giving deference to EPA decisions, the court also concluded that used petroleum products to which CERCLA-listed substances have not been added are covered by the petroleum exclusion.[101]

The court stated that the most critical question was whether the exclusion applies to petroleum mixed with soil.[102] The court called its conclusion that such soil was exempt "common sensical," stating:

> the petroleum exclusion unconditionally exempts petroleum products from CERCLA's reach by declaring them nonhazardous. In addition, soil itself is a nonhazardous substance under CERCLA, unless CERCLA-listed hazardous substances dwell in the dirt. Therefore, the union of one nonhazardous substance (petroleum) with another nonhazardous substance ("clean" soil) can only yield a nonhazardous final product of no concern to CERCLA.[103]

Judicial interpretations have given substance to EPA policy statements and have served to clarify the petroleum exclusion. While the courts have demonstrated that a case-by-case analysis of the petroleum exclusion is necessary to determine its application to each particular set of circumstances, two general conclusions can be drawn from district and circuit court decisions: (1) the courts favor applying a literal interpretation to the broad statutory language of the exclusion; and (2) the courts give great deference to EPA interpretations of the exclusion.

Clean Air Act." 42 U.S.C. § 9601(14) (1988). The Clean Air Act Amendments' impact on the petroleum exclusion is discussed in greater detail, *infra* at section III.

100. *Southern Pacific*, 790 F. Supp. at 985 (citing Wilshire Westwood Associates v. Atlantic Richfield Corporation, 1987 WL 119237 (C.D. Cal. Jan. 28, 1980)). *See* discussion of CAA's impact on the petroleum exclusion, *infra* at section IIIC.

101. *Id.* at 986.

102. *Id.*

103. *Id.* The court noted that "oil spills do not occur in a vacuum; rather, quite often such spills occur into soil." *Id.*

D. Tank Bottoms and the Petroleum Exclusion: Special Considerations for Production, Refining and Marketing Facilities

The issue of the petroleum exclusion's applicability to tank bottom questions deserves special attention in any discussion regarding the exclusion. CERCLA § 101(14) includes in its definition of hazardous substance "any hazardous waste . . . listed pursuant to section 3001 of the Solid Waste Disposal Act."[104] That list includes "[t]ank bottoms (leaded) from the petroleum refining industry."[105] Despite the specificity of the listing, the status of the petroleum exclusion as it applies to tank bottoms has been the subject of judicial interpretation.

As previously discussed, during the debate over SARA the Senate was assured that the scope of the petroleum exclusion would not be diminished by passage of the amendments, and that the exclusion would continue to apply to crude oil, crude oil tank bottoms, refined fractions of crude oil, and tank bottoms not specifically listed or designated as a hazardous substance.[106] Despite those assurances, the courts have recently interpreted the exclusion to the contrary.[107]

In *Cose v. Getty Oil Co. and Texaco Inc.*, the district court considered whether crude oil tank bottoms were excluded from CERCLA remediation pursuant to the petroleum exclusion.[108] Don Cose, the plaintiff, purchased a 40 acre parcel of undeveloped land

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104. 42 U.S.C. § 9601(14) (1988).

105. 40 C.F.R. § 302. Leaded tank bottoms from the petroleum industry are listed pursuant to § 3001 of RCRA and is designated as waste number K060.

106. 132 CONG. REC. S14,932 (daily ed. Oct. 3, 1986) (remarks of Sen. Simpson).

107. Cose v. Getty Oil Co., No. 5-90-0610 DFL, 1991 WL 315400, at *1 (E.D. Cal. Sept. 10, 1991) (not reported in F. Supp.); *rev'd* No. 91-16575, 1993 WL 301085 (9th Cir. Aug. 11, 1993).

108. 1991 WL 315400, at *1. The court provided an excellent description of crude oil tank bottoms:

> When crude oil is stored in tanks, suspended solids in the crude oil settle to the bottom of the tank. Because water is heavier than oil, it separates from the oil and also collects at the bottom of the tank. The bottom layer of the tank is known as basic sediment and water or "tank bottoms."

Id.

from Getty Oil Co.[109] The property had been used as a sump station for an oil storage facility prior to Cose's purchase.[110] Cose alleged that when he purchased the property, the tank bottom material was "covered with topsoil so that the substances and their existence upon the premises were unnoticeable by a reasonable inspection of the premises."[111] Cose sought recovery under CERCLA, damages for public nuisance, negligence, strict liability based on defective product, "statutory" tort, and fraud.[112] The defendants filed for summary judgment, contending that the plaintiff could not prove that hazardous substances had been disposed of on the property, since the substance in question, crude oil tank bottoms, was subject to CERCLA's petroleum exclusion.[113]

The court noted that "CERCLA expressly excludes petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance, from the definition of 'hazardous substances.'"[114] Citing EPA interpretations, the court stated that the two critical issues in determining application of the exclusion are: (1) whether the substance is "petroleum" and (2) whether it is specifically listed as a hazardous substance under CERCLA.[115] The court concluded that, under the circumstances, crude oil tank bottoms are "petroleum" under the exclusion.[116]

The court then addressed the second question of whether crude oil tank bottoms are a listed hazardous substance pursuant to CERCLA § 101(14).[117] The defendants contended that, since the listing specifically mentioned only "tank bottoms (leaded) from the petroleum refining industry" that the court should infer that "EPA specifically considered whether tank bottoms should be subject to CERCLA and that only leaded tank bottoms from the refining

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109. *Id.*

110. *Id.*

111. *Id.*

112. 1991 WL 315400, at *1.

113. *Id.* at *3.

114. *Id.*

115. *Id.* (citing EPA General Counsel Memorandum, *supra* note 50).

116. *Id.* at *4 (citing EPA General Counsel Memorandum for the definition of petroleum, *see* Region VI Memo, *supra* note 41).

117. *Id.*

industry are hazardous substances under CERCLA."[118] The court accepted this argument, noting that leaded tank bottoms from the petroleum marketing industry are distinguished from refining industry tank bottoms and that the leaded bottoms from the marketing industry are excluded. Therefore, the court determined that the listing was meant to apply solely to lead bottoms from the refining industry.[119] Based on its analysis of these two questions, the court concluded that crude oil tank bottoms were also intended to be excluded and granted the motion for summary judgment.[120]

On appeal, Cose contended that the district court incorrectly applied the substantive law in granting the summary judgment.[121] Accordingly, the United States Court of Appeals for the Ninth Circuit reviewed *de novo* the district court's interpretation of CERCLA and the grant of summary judgment.[122]

The court noted that the issue of whether the separated sediment and water that constitute crude oil tank bottoms is excluded from CERCLA was one of first impression.[123] Cose had alleged that the crude oil tank bottoms were discarded waste and not fractions of crude oil, and that the petroleum exclusion was therefore not applicable.[124] Getty contended that the tank bottoms were components of crude oil, and as such were within the scope of the petroleum exclusion.[125]

The court began its analysis by noting the definitions of "fraction" and "petroleum" it had developed in *Wilshire Westwood*.[126] The court defined "fraction" as "one of several portions (as of distillate or precipitate) separable by fractionation and

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118. *Id.*

119. *Id.*

120. *Id.*

121. Cose v. Getty Oil Co., 1993 WL 301085, at *2 (9th Cir. Aug. 11, 1993).

122. *Id.*

123. *Id.* at *4.

124. *Id.* The crude oil contained chrysene, a listed hazardous substance. Although chrysene was not present in quantities exceeding naturally occurring levels, if the tank bottoms were classified as discarded waste, the exclusion would not apply.

125. *Id.*

126. *Cose*, 1993 WL 301085 at *4 (citing Wilshire Westwood Assoc. v. Atlantic Richfield Co., 881 F.2d 801, 803 (9th Cir. 1989)).

consisting either of mixtures or pure chemical compounds."[127] "Petroleum" was defined as:

> an oily flammable bituminous liquid . . . that is essentially a compound mixture of hydrocarbons of different types with small amounts of other substances . . . and that is subjected to various refining processes . . . for producing useful products (as gasoline, naphtha, kerosene, fuel oils, lubricants, waxes, asphalt, coke, and chemicals) . . . .[128]

The court concluded that "crude oil tank bottoms do not fall within the plain meaning of the definition of 'fraction' or 'petroleum.'"[129]

The court classified crude oil tank bottoms as waste,[130] and, citing *United States v. Western Processing Co.*, the court noted that there is a distinct difference between wastes and recyclables. The court also noted that conceptually, there is a difference between petroleum releases, products from tanker spills or from leaking storage tanks, and the delivery of petroleum-related waste material to a disposal or treatment facility.[131] The court stated that Getty had disposed of the tank bottom materials with no intention of recycling such material, "[h]ence, the 'waste v. recyclable' distinction further supports a conclusion that crude oil tank bottoms are not a fraction of crude oil and that the tank bottoms therefore do not fall within CERCLA's petroleum exclusion."[132]

Additionally, citing general legislative history, the court held that CERCLA's focus on cleanup of hazardous waste dump sites further compelled the court to find that crude oil tank bottoms should not be protected under CERCLA's petroleum exclusion.[133]

Addressing the district court's grant of summary judgment, the court determined that the EPA memoranda cited by the district

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127. *Id.* (citing Wilshire Westwood, 881 F.2d at 803).

128. *Id.* at *4.

129. *Id.* at *5.

130. *Cose*, 1993 WL 301085 at *5.

131. *Id.* (citing United States v. Western Processing Co., 761 F. Supp. 713, 721 (W.D. Wash. 1991)).

132. *Id.* at *6.

133. *Id.* The legislative history cited was very general in nature, referring broadly to CERCLA's purpose, and did not mention crude oil tank bottoms.

court "do not bear upon whether crude oil tank bottoms are 'petroleum' within the meaning of CERCLA," and that the district court erred in its conclusion of law.[134] The court reasoned that crude oil tank bottoms cannot be classified as petroleum waste or waste oil because they are not "petroleum" to begin with, since the bottoms are "merely comprised of wastes and suspended solids that settle out of crude oil and collect at the bottom of crude oil storage tanks en route to the refineries."[135] Based on this reasoning, the court found the district court's reliance on EPA memoranda addressing the application of the exclusion to petroleum products to be misplaced.[136]

The court then addressed the district court's acceptance of Getty's contention that EPA considered tank bottoms in general for listing as a hazardous waste, but decided only to list leaded tank bottoms from the petroleum refining industry.[137] The court dismissed this argument, stating that such an interpretation incorrectly assumes that CERCLA considers all tank bottoms to be "petroleum, including crude oil or a fraction thereof."[138] Identifying what it considered "critical distinctions" between leaded tank bottoms and crude oil tank bottoms, the court noted:

> Leaded tank bottoms consist of waste generated from cleaning leaded gasoline storage tanks. [citation omitted] As such, such substances have been "subjected to various refining processes" in the production of leaded gasoline. Leaded gasoline in turn is considered a "useful product" within the definition of petroleum, as judicially noticed by our own court.[citation omitted][139]

Consistent with its reasoning, the court held that leaded tank bottoms constitute "petroleum or a fraction thereof" and as such fall within the petroleum exclusion unless otherwise listed as a hazardous substance, but that crude oil tank bottoms are hazardous substances not subject to protection despite its exclusion from the list of hazardous

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134. *Cose*, 1993 WL 301085 at *6.
135. *Id.*
136. *Id.* at *6.
137. *Id.* at *7.
138. *Id.*
139. *Id.*

substances.[140] Almost as an afterthought, the court dismissed the statement regarding crude oil tank bottoms made during the Senate debate on SARA, deeming it to be "[p]ost-enactment legislative history" entitled to "little if any, weight."[141] The appellate court reversed the district court and found Getty liable for cleanup costs as a matter of law.[142]

This decision could have a substantial impact on oil producers and will severely limit the scope of the petroleum exclusion if it stands. The Ninth Circuit's judgment is questionable, however, for several reasons. First, the court likely erred when it concluded that "crude oil tank bottoms do not fall within the plain meaning of 'fraction.'"[143] The court correctly cited the definition of "fraction" as "one of several portions (as of a distillate or precipitate) *separable* by fractionation and consisting either of mixtures or pure chemical compounds."[144] The court failed to note, however, the difference between the words "separable" and "separated," and applied the definition as if the word "separated" had been used.

"Separable" is defined as "*capable* of being separated or disassociated."[145] By contrast, "separated" is the past tense of "separate," which is defined as "to set or keep apart: detach."[146] Thus, the meaning of fraction is altered greatly by substituting the word "separable" in its definition with the plain meaning of "separated."[147]

Furthermore, the definition of "fraction" includes as an example "precipitate."[148] "Precipitate" is defined as "an insoluble amorphous or crystalline solid that may fall to the bottom . . . and that

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140. *Id.*

141. *Id.* at *8.

142. *Id.*

143. *Id.* at *4.

144. *Id.* (emphasis added); Wilshire Westwood Assoc. v. Atlantic Richfield Corp., 881 F.2d 801, 803 (9th Cir. 1989) (citing WEBSTER'S NEW INTERNATIONAL DICTIONARY (3d ed. 1981)).

145. WEBSTER, *supra* note 144 (emphasis added).

146. *Id.*

147. Compare "one of several portions capable of being separated by fractionation" with "one of several portions detached by fractionation." WEBSTER, *supra* note 144.

148. WEBSTER, *supra* note 144.

can often be separated by filtration."[149] The court appears to have erroneously excluded crude oil tank bottoms from the definition of "fraction" by virtue of the fact that the solids settled out of the crude oil solution naturally. Not only do the solids satisfy the definition of "precipitate," but they are also "capable of being separated by fractionation." Indeed, many of the solids that have not separated out of the crude oil naturally before it reaches the refinery are fractionated out during the refining process.

Second, the court's decision to dismiss the statement regarding crude oil tank bottoms made in the Senate debate is questionable. In *Wilshire Westwood*, the court found it necessary and proper to examine congressional action when Congress was presented with opportunities to amend CERCLA, since the legislative history of the petroleum exclusion was so sparse.[150] In fact, the *Westwood* court at one point cites the same statement it dismisses offhandedly in *Cose*, using Congress' failure to alter the exclusion in the 1986 amendments to support post enactment EPA interpretations of the exclusion. The court stated that "[a]lthough postenactment developments cannot be accorded 'the weight of contemporary legislative history, we would be remiss if we ignored these authoritative expressions concerning the scope and purpose of Title IX.'"[151] Likewise, Congress also refrained from altering the petroleum exclusion despite a clear indication that it was believed by Congress to encompass crude oil tank bottoms.

Finally, the court noted in *Wilshire Westwood* that "[t]his court must look beyond the express language of a statute where a literal interpretation 'would thwart the purpose of the over-all statutory scheme or lead to an absurd result.'"[152] Arguably, the statutory scheme of the CERCLA petroleum exclusion is thwarted by the court's interpretation. In *Cose*, the court emphasizes that CERCLA focuses on the cleanup of hazardous waste dump sites, and concludes that protecting crude oil tank bottoms from remediation

149. *Id.*
150. 881 F.2d at 806.
151. *Id.* at 808 (citations omitted).
152. *Id.* at 804 (citing Brooks v. Donovan, 699 F.2d 1010, 1011 (9th Cir. 1983)).

under CERCLA is contrary to this focus.[153] But the court's reasoning is circular: if failure to regulate crude oil tank bottoms were not contrary to the purpose of CERCLA, it would not need to be excluded.[154] The question the court should have asked is whether excluding crude oil tank bottoms would thwart the purpose of the overall scheme of the petroleum exclusion. Additionally, assuming the court's definition of "fraction" as applied is correct, the court's conclusion leads to the absurd conclusion that naturally occurring settlement of sediments should expose a party to CERCLA liability, while purposeful separation of the sediments would not.

III. RCRA'S RELATIONSHIP TO THE CERCLA PETROLEUM EXCLUSION

RCRA and CERCLA, although they are separate statutory schemes, still share a common goal: coping with the problem of hazardous waste. CERCLA was passed to compensate for the perceived inadequacies of RCRA. RCRA did not effectively address the problem of inactive or abandoned waste sites, unless the sites posed an imminent hazard.[155] As stated by the United States Court of Appeals for the Fifth Circuit:

> CERCLA substantially changed the legal machinery used to enforce environmental cleanup efforts and was enacted to fill the gaps left in an earlier statute, the Resource Conservation and Recovery Act of 1976 ("RCRA"). The RCRA left inactive sites largely unmonitored by the EPA unless they posed an imminent hazard. CERCLA addressed this problem "by establishing a means of controlling and financing both governmental and private responses to hazardous

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153. Cose v. Getty Oil Co., No. 91-16575, 1993 WL 301085, at *6 (9th Cir. Aug. 11, 1993).

154. For example, refined gasoline contains several hazardous constituents, the spilling or leaking of which is contrary to the focus of CERCLA. However, the petroleum exclusion allows property contaminated by refined gasoline to go unregulated contrary to the purpose of CERCLA, which is the cleanup of hazardous waste sites. If it is the purpose of CERCLA we are examining, rather than that of the exclusion, the gasoline-contaminated property would have to be regulated despite the petroleum exclusion.

155. 42 U.S.C. § 6973 (1988).

> releases at abandoned and inactive waste disposal sites."[156]

Despite Congress' intentions, whether CERCLA adequately filled the gaps is questionable.[157] As a result, Congress and EPA attempted to correct some of RCRA's shortcomings in subsequent legislation and administrative actions. Their actions have raised questions about the extent to which this legislation may affect, or even undermine, CERCLA's petroleum exclusion. Specifically, Congress chose to regulate leaking underground storage tanks,[158] and EPA instituted new procedures for determining toxicity, the Toxicity Characteristic Leaching Procedures (TCLP).[159]

A. Leaking Underground Storage Tanks (LUST)

Contamination as a result of leaking underground storage tanks has become an increasing concern in the past decade. EPA estimates that there are 1.4 million underground storage tanks currently in use in the United States.[160] Approximately eighty-five percent of these tanks are constructed of steel.[161] If these tanks are not replaced within 15-20 years, corrosion of the tanks will result in leakage.[162] Concern over tank leakage focused on the possibility of groundwater contamination, since over half the population of the United States relies on groundwater for their primary source of drinking water.[163] Some industry experts have suggested that 75,000-100,000 underground tanks may be leaking.[164] Congress' concern

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156. Amoco Oil Co. v. Borden, Inc., 889 F.2d 664, 667 (5th Cir. 1989) (citing Bulk Distrib. Ctrs., Inc. v. Monsanto Co., 589 F. Supp. 1437, 1441 (S.D. Fla. 1984)).

157. *Id.* The Fifth Circuit summed up this view stating:

> Congress enacted CERCLA in response to well-publicized toxic waste problems. Yet, because the final version was enacted as a "last-minute compromise" between three competing bills, it has "acquired a well-deserved notoriety for vaguely-drafted provisions and an indefinite, if not contradictory, legislative history."

Id. (citing United States v. Mottolo, 605 F. Supp. 898, 902, 905 (D.N.H. 1985)).

158. 42 U.S.C. § 6991 (1988).

159. 55 Fed. Reg. 26,986 (June 29, 1990).

160. 130 CONG. REC. 3832, 98th Cong., 2d Sess. (1984).

161. *Id.*

162. *Id.* at 3833.

163. *Id.* at 3832.

164. *Id.* at 3833.

with the potential groundwater contamination in part stems from a report presented to the House which noted that benzene and ethylene dibromide, both found in gasoline, are suspected carcinogens, and that other gasoline constituents may cause a "variety of toxic effects."[165] Congress recognized that leaking tanks containing chemicals or hazardous wastes were potentially subject to CERCLA liability, but that EPA response to the large majority of tanks, those containing petroleum products, was precluded by the petroleum exclusion.[166]

Rather than alter the petroleum exclusion as a result of these findings, Congress enacted a comprehensive program for the regulation of underground storage tanks.[167] This program was a part of the 1984 amendments to RCRA, and it addressed recordkeeping, release detection and reporting, corrective action, and financial responsibility.[168] In 1986, SARA added amendments to RCRA requiring state environmental agencies to compile tank inventories and to provide this information to EPA.[169] The amendments gave EPA and the state authority to clean up releases from underground storage tanks or to require the owner or operator to take corrective action.[170] Finally, SARA established a $500 million trust fund for the cleanup of such sites.[171] EPA has recently adopted a new method for determining whether substances leaking from underground tanks are subject to RCRA corrective actions.[172] While RCRA subtitle I UST regulations do not directly alter CERCLA's petroleum exclusion, this new method, the toxicity characteristic leaching procedure, may undermine the exclusion.[173]

B. TCLP and CERCLA: Will the Exclusion be Undermined?

One of the criteria that the EPA uses to determine whether a substance is a RCRA hazardous waste is the Toxicity Characteristic

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165. *Id.*

166. *Id.* at 3834.

167. 42 U.S.C. §§ 6991-6991(i) (1988). This section is commonly referred to as RCRA Subtitle I.

168. *Id.*

169. *Id.* § 6991a(c).

170. *Id.* § 6991b(h).

171. 26 U.S.C. § 9508 (1987); 42 U.S.C. § 6991b(h)(1) (1988).

172. *See* 42 U.S.C. § 6901 (1988).

173. *See id.*

Leaching Procedure (TCLP).[174] The TCLP method has the potential to make petroleum contaminated soil and debris from leaking underground storage tanks a RCRA hazardous waste.[175]

The EPA promulgated a rule on March 29, 1990, which revised the toxicity characteristics used to identify wastes which are hazardous and therefore subject to RCRA regulation.[176] Prior to this rule, the EPA used a procedure called the Extraction Procedure (EP).[177] The EP defined the toxicity of a waste by measuring the potential for toxic constituents to leach out of a waste not regulated by Subtitle C of RCRA and contaminate ground water.[178] EPA designed this procedure to identify the leaching of such constituents under conditions of improper management.[179]

Congress became concerned that the current system for dealing with hazardous waste did not adequately address some wastes which pose a threat to human health and the environment.[180] Subsequently, Congress directed EPA to promulgate additional characteristics, since the existing characteristics did not identify wastes which were hazardous due to organic constituents occurring at toxic levels.[181]

The TCLP is a new version of the EP designed to address the leaching of organic compounds more accurately.[182] In addition to replacing the EP leach test, the TCLP added twenty-five organic chemicals to the list of toxic constituents and established regulatory levels for these constituents.[183] The effect of this rule was to bring additional solid wastes within the rubric of RCRA hazardous waste provisions.[184] Industries dealing with petroleum products were particularly concerned with the lower toxicity threshold for benzene

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174. 55 Fed. Reg. 11,798 (Mar. 29, 1990).
175. 58 Fed. Reg. 8,504 (Feb. 12, 1993).
176. 55 Fed. Reg. 11,798 (Mar. 29, 1990).
177. *Id.* at 11,800.
178. *Id.*
179. *Id.*
180. *Id.*
181. *Id.*
182. *Id.* at 11,801.
183. 58 Fed. Reg. 8,504 (Feb. 12, 1993).
184. *Id.*

in the new rule.[185] The rule would characterize leachate containing levels of benzene higher than the designated threshold as a hazardous waste.[186] Using the TCLP to classify petroleum-contaminated soil and debris as a RCRA hazardous waste could have a tremendous impact on the petroleum industry and could seriously undermine the CERCLA petroleum exclusion. EPA has, however, attempted to limit the impact of the TCLP on petroleum products.

In the preamble to the TCLP, EPA addressed the relationship of the TCLP to other regulatory authorities, including CERCLA.[187] EPA recognized that the rule may effect remediations performed under CERCLA, particularly with regard to the CERCLA requirement that remedial actions comply with all applicable or relevant and appropriate requirements (ARARs) of other laws, including RCRA.[188] As a result of this requirement, petroleum-contaminated media excluded from CERCLA requirements are potentially subject to expensive RCRA requirements during remediation activities.

Those who felt they were potentially affected were concerned that the rule would result in an increased number of hazardous waste determinations during CERCLA remediations, which would create Superfund sites attributable to petroleum and petrochemical wastes that exceed TCLP levels.[189] The EPA dismissed this concern, stating:

> While it is clear that CERCLA remediations must comply with federal and state ARARs, the TC is not used by CERCLA to determine whether or not to undertake a clean-up action. Rather, the TC will apply to decisions concerning the management of solid wastes (e.g., soil and debris generated during cleanup activities).[190]

EPA chose to further limit the applicability of TCLP to petroleum-contaminated media in the TC and subsequent rules. In the

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185. 55 Fed Reg. 11,855.
186. *Id.*
187. *Id.* at 11,837.
188. *Id.*
189. *Id.*
190. *Id.*

TCLP, the EPA temporarily deferred applicability of the TC rule to media and debris contaminated by petroleum from underground storage tanks subject to the corrective action of subtitle I of RCRA.[191] The rule limited the deferral to the twenty-five newly-listed chemicals under the TC.[192] The EPA later decided that making the deferral permanent was warranted.

In a proposed exemption from RCRA testing requirements for media contaminated by leaking underground storage tanks, EPA noted that the potential impact of the TC on materials generated from UST cleanups was not apparent until the late stages of the promulgation of the TC rule.[193] As a result, the Agency had little information on the amount of contaminated media that would be considered hazardous waste as a result of the rule.[194] Addressing the information currently available, the EPA found that

> the impact of applying subtitle C to [underground storage tank (UST)] cleanups might be severe in terms of the administrative feasibility of both subtitle C and subtitle I programs. A preliminary assessment indicated that the number of UST cleanup sites and the amount of media and debris at each site that would exhibit the toxicity characteristic could be extremely high, with EPA expecting hundreds of thousands of UST releases to be identified in the next few years. The agency believed that subjecting all, or even a portion, of these sites to subtitle C requirements could overwhelm the hazardous waste permitting program and the capacity of existing hazardous waste treatment, storage, and disposal facilities.

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191. *Id.* at 11,862. The rule stated:

> § 261.4 Exclusions . . .
>
> (b)(10) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of § 261.24 and are subject to the corrective action regulations under part 280 of this chapter.

40 C.F.R. § 261.4(b)(10).

192. 58 Fed. Reg. 8,504. These twenty-five substances are listed in Hazardous Waste Codes D018 through D043. This list includes benzene.

193. *Id.*

194. *Id.*

> In addition, EPA believed that imposition of the requirements could delay UST cleanups significantly, require an enormous new commitment of Federal and State resources, and undermine the state and local focus of the UST program.[195]

EPA's proposed action would permanently exempt contaminated media and debris subject to subtitle I of RCRA generated from petroleum UST corrective actions from portions of the TC rule.[196] "Contaminated media" encompasses naturally-occurring materials that have been contaminated by releases from petroleum underground storage tanks.[197] In essence, the proposed rule would make permanent the temporary deferral found in the TC rule. The EPA has justified the proposed rule on the grounds that such a rule is necessary to save money, reduce administrative burdens, and speed the cleanup of leaking tanks.[198] Application of the TC rule to petroleum-contaminated soil would require either the excavation and incineration of the contaminated soil, removal of the soil to a hazardous waste landfill, or on-site treatment in compliance with strict hazardous waste rules, resulting in a great increase in expense.[199]

EPA has additionally proposed to apply the three year suspension now in effect for petroleum-contaminated media from USTs to media contaminated by petroleum from other sources.[200] EPA has suggested a 10,000 gallon limit on the exemption, but critics of the plan have opposed the ceiling on the basis of the difficulty of accurately assessing the amount of a petroleum release.[201]

Although the TCLP potentially threatens to undermine CERCLA's petroleum exclusion, so far EPA has limited RCRA's

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195. *Id.*

196. *Id.* at 8,505.

197. *Id.*

198. *Cost Savings, State Concerns Support Exempting Soil Polluted By Leaking Tanks*, 23 ENV'T. REP. (BNA) 2711 (Feb. 19, 1993).

199. *Id.* at 2712. "The cost of treatment would increase from $55 per cubic yard of contaminated soil to as much as $1,060 . . . . The total annual cost nationwide could be as much as $4 billion during each of the first five years after the exemption from the TC rule was lifted." *Id.*

200. 23 ENV'T. REP. (BNA) 2817 (Feb. 19, 1993).

201. *Id.*

infringement on the exclusion to subtitle I requirements on LUST. If EPA fails in its attempt to extend the TC deferral, however, CERCLA's petroleum exclusion could be seriously undermined, since the petroleum contaminated media could be classified as a RCRA hazardous waste by this procedure. While the petroleum exclusion would still function to exempt contaminated property from CERCLA liability, subjecting the property to RCRA subtitle C requirements would hamper efforts to develop or alienate the property.

C. The 1990 Clean Air Act Amendments: Clearing the Air at the Expense of the Petroleum Exclusion?

In 1990, Congress considered and passed amendments to the Clean Air Act (Amendments). The Amendments listed 189 hazardous air pollutants (HAPs), including benzene.[202] This listing of benzene as a HAP raised new questions regarding the CAA's effect on the scope of the petroleum exclusion. The CERCLA definition of hazardous substances includes ". . . any hazardous air pollutant listed under section 112 of the Clean Air Act . . . ."[203] Had Congress intended to remove the benzene fraction of gasoline from CERCLA's petroleum exclusion? The answer, apparently, is that Congress had no such intent.

As briefly mentioned previously,[204] the tension between the Amendments and the petroleum exclusion was addressed in *Southern Pacific Transportation Co. v. CALTRANS*, in which the court concluded that the Amendments did nothing to alter the petroleum exclusion.[205] Citing *Wilshire Westwood*, the court rejected the plaintiff's contention that the Amendments' designation of benzene as a HAP subjected gasoline to CERCLA remediation as a result of its containing a listed hazardous substance.[206] The court noted that at the time the *Wilshire Westwood* court determined that hazardous constituents of petroleum are included in the exclusion, benzene was

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202. 42 U.S.C. § 7412(b)(1) (1988).

203. *Id.* § 9601(14)(E).

204. *See* discussion, *supra*, at section IIC.

205. 790 F. Supp. 983, 985 (C.D. Cal. 1991).

206. *Id.* (citing Wilshire Westwood Assoc. v. Atlantic Richfield Corp., 881 F.2d 801 (9th Cir. 1989).

already listed as a hazardous substance.[207] The court also noted that "there is nothing in the legislative history of the Clean Air Act Amendments of 1990 to indicate that Congress intended any change whatsoever in the scope of the petroleum exclusion . . . ."[208] The EPA came to a similar conclusion in its Clean Air Act Enforcement Authority Guidance document.[209]

In the guidance document, the EPA addressed the relationship between the CAA and five other environmental statutes, including CERCLA.[210] EPA noted that, while the focus of the provisions of all six statutes addressed is the abatement, removal, mitigation, or remediation of hazardous or endangering environmental conditions, there are "important differences in definitional coverage *or exclusions* which should be considered."[211] Additionally, the EPA noted that the provisions of the different statutes cover different substances and different media.[212] The document specifically addresses CERCLA § 106 provisions, incorporating by reference the hazardous substances addressed by the CAA, RCRA, CWA, and TSCA.[213] EPA specifically recognized that "the universe of substances regulated under the CAA . . . may well cover substances that are excluded from regulation under CERCLA."[214] Although the CAA regulates some substances excluded from CERCLA regulation, such regulation will not be at the expense of the petroleum exclusion, and it is apparent that in no event will the Amendments operate to subject a source to CERCLA regulation when it would otherwise be exempted by the petroleum exclusion. The two statutes address the protection of distinct media sources, and neither purports to interfere with the operation of the other. The Amendments may affect the petroleum exclusion in a manner that does not constitute a clash between the statutes; that is, the amendments may reduce the production of substances subject to the exclusion.

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207. *Id.* Benzene has been listed as a hazardous air pollutant since June 8, 1977.
208. *Id.* at n.2.
209. 56 Fed. Reg. 24,393 (May 30, 1991).
210. *Id.* at 24,395.
211. *Id.* at 24,397.
212. *Id.* at 24,398.
213. *Id.* at 24,395.
214. *Id.* at 24,398.

Title II of the Amendments of 1990 substantially tightens mobile source emission standards, in part by emphasizing a change in fuel composition as a means to control mobile source pollution.[215] These provisions for new and reformulated fuels apply only to certain ozone non-attainment areas, but the targeted areas contain a large percentage of the population of the United States.[216] The requirements will directly affect the amount of hazardous constituents, particularly lead and benzene, which translates into a reduction in the amount of these constituents protected by the petroleum exclusion.

For example, after January 1, 1995, gasoline may no longer contain lead or lead additives.[217] Additionally, clean fuel emission standards provide for alternative clean fuels which will not present the same disposal concerns of contemporary petroleum products.[218]

Perhaps most importantly, the requirements for reformulated fuel drastically lower the amount of benzene allowable in gasoline.[219] Currently, gasoline specifications limit benzene content to five percent by volume.[220] The Amendments require benzene content to be limited to one percent by volume, and heavy metals, including lead and manganese, are prohibited.[221]

While the Clean Air Act Amendments do not directly infringe upon CERCLA's petroleum exclusion, they have the potential to limit the amount of substances to which the exclusion applies. Once the substances listed by the CAA are removed from petroleum products, the substances may be subject to regulation under CERCLA. These substances would otherwise be subject to the petroleum exclusion as a component of petroleum.

IV. CONCLUSION

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215. MOYER AND FRANCIS, CLEAN AIR ACT HANDBOOK: A PRACTICAL GUIDE TO COMPLIANCE 2-1 (2d ed. 1992).

216. *Id.*

217. *Id.* at 2-17.

218. *Id.* at 2-18. The clean fuel alternatives may include methanol, ethanol, or other alchohols, reformulated gasoline, natural gas, liquified petroleum gas and hydrogen or electricity.

219. *Id.* at 2-12.

220. *Id.*

221. *Id.*

With the exception of the limited infringement of the LUST requirements and the questionable decision by the Ninth Circuit to remove crude oil tank bottoms from the petroleum exclusion's protection, CERCLA's petroleum exclusion has survived unmolested. EPA interpretations and court decisions have provided useful guidance when handling petroleum contamination issues, but each such situation must be evaluated individually since past interpretations have not provided a system for blanket application of the exclusion.

EPA has consistently given a liberal interpretation to the petroleum exclusion, finding it to apply to all petroleum products that have not been contaminated with hazardous constituents after leaving the refinery and that do not contain hazardous constituent levels exceeding those naturally occurring in petroleum. With the exception of the Ninth Circuit's decision in *Cose*, the courts have likewise applied the petroleum exclusion liberally, and have further extended the exclusion to apply to gasoline containing lead additives. Although the exclusion is currently construed liberally, the future of the exclusion is unclear.

On February 18, 1993, President Clinton attacked the federal Superfund program, recommending "big changes in the environmental Superfund program . . . to make polluters pay more and the taxpayers pay less."[222] The administration has not released details of how it plans to change the program, but the recent decision in *Environmental Defense Fund v. City of Chicago*[223] may make any attempt to change the application of the exclusion through EPA interpretation more difficult.

In *EDF v. City of Chicago*, the United States Court of Appeals for the Seventh Circuit determined that ash generated by municipal waste was not included in RCRA's municipal waste exemption.[224] The Supreme Court granted certiorari in the case and vacated and remanded the case back to the Seventh Circuit in light of an EPA memorandum declaring such waste ash to be exempt.[225] The

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222. 23 Env't. Rep. (BNA) 2829-30 (Feb. 26, 1993).

223. 985 F.2d 303 (7th Cir. 1993).

224. *Id.* at 304.

225. City of Chicago v. Environmental Defense Fund, __ U.S. __, 113 S. Ct. 2992 (1993).

memorandum reversed the agency's prior official position that the ash was not exempt.[226] The Seventh Circuit upheld its previous ruling on remand, holding that:

> The agency's change of position and Administrator Reilly's memorandum explaining it do not persuade us that our analysis of the RCRA was in error. As we explained in the original opinion, the EPA has changed its view so often that it is no longer entitled to the deference accorded an agency's interpretation of the statute it administers. [citation omitted] This additional change of position does not alter that conclusion.[227]

Similarly, any change in the previously consistent EPA interpretations of the scope of the petroleum exclusion is likely to be skeptically greeted by the court. As discussed, *supra*, the Ninth Circuit in *Wilshire Westwood* deferred to agency interpretations regarding the petroleum exclusion in large part because the interpretations had been consistent.[228] Therefore, it is unlikely that the Clinton EPA could substantially impact the petroleum exclusion through administrative interpretation. Rather, any substantial change in the petroleum exclusion must be accomplished legislatively. Until such time, the petroleum exclusion will continue to be applied liberally, with deference given to EPA interpretations which continue to be consistent with past interpretations.

In a perfect world, there would be no hazardous substances, and therefore no pollution from hazardous substances. In an almost perfect world, there would be unlimited funds for the cleanup of such pollution. Unfortunately, we live in neither. The products we demand as consumers come with a price: we have created hazardous waste sites and have limited dollars to clean up what we have created.

One particular theme that has pervaded the congressional debate regarding the proposed oil spill provisions, CERCLA, RCRA, and LUST, is the funding of site cleanup. While some may argue that the petroleum exclusion is fundamentally wrong and that no

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226. EDF v. City of Chicago, 985 F.2d at 304.

227. *Id.*

228. *See supra* text accompanying note 76.

hazardous substances should be shielded from remediation, cleanup cost considerations will force us all to live with some form of the pollution we have created, at least until we can afford the cleanup. Given the universal penchant of this country's residents for relatively excessive petroleum consumption, it seems only fair that petroleum-contaminated sites are excluded from remediation, as long as we cannot afford to clean up every site containing hazardous substances. Contemporary legislation such as LUST and the Clean Air Act Amendments have resulted in provisions that will serve to maintain the status quo, or, at the least, reduce the incidence of future petroleum contamination. Until such time as we can afford or are willing to pay for the cleanup of these sites, the petroleum exclusion will function not to stymie cleanup of hazardous waste sites, but rather to divert available funds to other sites. While it may be easy in this case to lay the blame and the cost at the feet of the petroleum industry, it is ultimately the consumer who dictates through use the amount of waste generated, and it is ultimately the consumer who must be made to pay. Until that time, we will have to live with compromises such as the petroleum exclusion.