

**ENVIRONMENTAL LAW
DEVELOPMENTS IN 1990
AFFECTING THE ENERGY INDUSTRY**

Prepared by

**David E. Pierce
Research Associate
Center for Environmental Research and Technology
University of Tulsa**

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by

David E. Pierce
Professor of Law
Washburn University School of Law

Research Associate
Center for Environmental
Research and Technology

Of Counsel
Shughart Thomson & Kilroy

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I. INTRODUCTION

This report examines major environmental law developments during 1990 that impact the energy industry. During 1990 Congress passed, and the President signed, two major laws that will significantly affect the energy industry: the Clean Air Act Amendments of 1990¹ and the Oil Pollution Act of 1990.² The Environmental Protection Agency also adopted various regulations that will have particular impact on the energy industry, such as the EPA's new Toxicity Characteristics Rule.³ In addition to legislative and administrative actions, the courts have been active in 1990, particularly in the area of hazardous waste regulation. This report surveys the cases that have special relevance to the energy industry.

II. LEGISLATIVE DEVELOPMENTS

A. Oil Pollution Act of 1990

1. The Oil Pollution Acts: 1924 to 1990

The first federal statute specifically regulating oil spills was passed in 1924 as the Oil Pollution Act.⁴ The 1924 Act was limited to discharges of oil "into or upon the coastal navigable

¹Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (1990).

²Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484 (1990).

³Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Toxicity Characteristics Revisions, 55 Fed. Reg. 11,789 (1990) (to be codified at 40 C.F.R. Part 261).

⁴Oil Pollution Act of 1924, 43 Stat. 604, amended by Pub. L. No. 89-753, 80 Stat. 1253 (1966).

water of the United States"⁵ and imposed misdemeanor penalties. In 1966 the Act was amended to extend to all "navigable waters of the United States" and, in addition to criminal penalties, provided for recovery of cleanup costs from the person causing the discharge.⁶ Major changes to strengthen the law were made in 1970, in response to the blowout of an off-shore drilling operation near Santa Barbara. The 1970 version of the Act was incorporated into the Federal Water Pollution Control Act Amendments of 1972 with the general structure of the Act remaining the same. However, the scope of the act was enlarged to include hazardous substances.⁷ Since 1972, with various amendments to the Federal Water Pollution Control Act, the general structure of the oil pollution provisions have remained the same while the limits of liability for oil discharges have been increased.⁸

The spill from the Exxon Valdez in Prince William Sound prompted a major legislative response similar to Congressional reaction in 1970 to the Santa Barbara oil spill. The fallout from the Exxon Valdez spill is the Oil Pollution Act of 1990 ("OPA").⁹ Prospectively, the OPA creates a liability-based regulatory regime very similar to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").¹⁰ However, the OPA also adopts many measures to try and prevent oil spills from occurring, such as phasing out single hulled tankers and requiring training of vessel personnel.

2. Establishing Liability Under the Act

The OPA builds on the CERCLA-type liability scheme. The event giving rise to liability is a "discharge"¹¹ or a "substantial threat

⁵Oil Pollution Act of 1924, 43 Stat. 604, 606 (amended 1966).

⁶Oil Pollution Act of 1966, Pub. L. No. 89-753, 80 Stat. 1253, amended by Oil Pollution Act of 1970, Pub. L. No. 91-224, 84 Stat. 91.

⁷See 33 U.S.C. § 1321 (1989).

⁸Id.

⁹Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484 (1990).

¹⁰Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601 to 9675 (1989).

¹¹Discharge is defined at § 1001(7) of the Act to include:

[A]ny emission (other than natural seepage),

of a discharge" of "oil,"¹² from a "vessel"¹³ or a "facility,"¹⁴ into "navigable waters"¹⁵ or "adjoining shorelines" or the "exclusive economic zone."¹⁶ Unlike CERCLA, which has a substantial retroactive impact, the impact of the OPA is primarily

intentional or unintentional, and includes, but is not limited to, spilling, leaking, pumping, pouring, emitting, emptying, or dumping; . . .

OPA § 1001(7), 104 Stat. at 486.

¹²Oil is defined to include:

[O]il of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act; . . .

OPA § 1001(23), 104 Stat at 487.

¹³Vessel means "every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel." OPA § 1001(37), 104 Stat. at 489.

¹⁴Facility is defined to include:

[A]ny structure, group of structures, equipment, or device (other than a vessel) which is used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil. This term includes any motor vehicle, rolling stock, or pipeline used for one or more of these purposes; . . .

OPA § 1001(9), 104 Stat. at 486.

¹⁵Navigable waters means "the waters of the United States, including the territorial sea; . . ." OPA § 1001, 104 Stat. at 487.

¹⁶Oil Pollution Act of 1990, Pub. L. No. 101-380, § 1002, 104 Stat. 484, 489 (1990).

prospective.¹⁷ The OPA applies only to a discharge or threat of a discharge occurring after the date of enactment--August 18, 1990.¹⁸

Although the 1990 Act was prompted by spills from ships into major waterways,¹⁹ it is much broader and addresses discharges of oil that may occur from offshore and onshore exploration, development, production, and marketing activities.²⁰ The individual or entity liable for a discharge of oil is the "responsible party" for the vessel or facility.²¹ The Act defines the "responsible party" depending upon the type of structure giving rise to the discharge.²² For example, if the structure is a pipeline, the

¹⁷However, the OPA in many situations can have an essentially retroactive impact. For example, poorly maintained oil storage facilities, which complied with pre-OPA law, can give rise to OPA liability if they presently pose a substantial threat of a discharge of oil; or oil is subsequently discharged from the facilities.

¹⁸OPA § 1020, 104 Stat. at 506.

¹⁹The Senate Report states:

The 11-million gallon spill from the Exxon Valdez in Prince William Sound, Alaska, and the three spills within a 24-hour period just months later in the coastal waters of Rhode Island, the Delaware River and the Houston Ship Channel, have demonstrated that oil pollution from accidental tanker spills is a real and continuing threat to the public health and welfare and the environment.

S. Rep. No. 101-94, 101st Cong., 2nd Sess. 2 (1990).

²⁰The Act defines an "onshore facility" as "any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under, any land within the United States other than submerged land; . . ." OPA § 1001(24), 104 Stat. at 487. "Offshore facility" is defined to include "any facility of any kind located in, on, or under any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel; . . ." OPA § 1001(22), 104 Stat. at 487.

²¹OPA § 1002(a), 104 Stat. at 489.

²²The statute lists six categories of structures: vessels, onshore facilities, offshore facilities, deepwater ports, pipelines, and abandoned structures. OPA, § 1001(32)(A)-(F), 104 Stat. at 488-89.

responsible party is defined as "any person owning or operating the pipeline."²³ If the structure is an "onshore facility" the responsible party is "any person owning or operating the facility."²⁴ If the structure has been abandoned, the responsible party is the person who would have been the responsible party "immediately prior to the abandonment."²⁵

To establish liability, the following must be shown under the Act:

- (1) There has been a discharge or threatened discharge of oil;
- (2) From a vessel or facility;
- (3) Owned or operated by any person; and
- (4) The discharge was into or upon the waters of the United States.²⁶

The Act provides that "[n]otwithstanding any other provision or rule of law" the owner or operator of the vessel or facility is "liable" for "removal costs and damages," specified in the Act, "that result from such incident."²⁷ The definition section provides that the term "liable" must be "construed to be the standard of liability which obtains under section 311 of the Federal Water Pollution Control Act (33 U.S.C. 1321); . . ."²⁸ The § 311 standard has consistently been held to be strict liability.²⁹ However,

²³OPA § 1001(32)(E), 104 Stat. at 489.

²⁴OPA § 1001(32)(B), 104 Stat. 488. If the owner of the facility is a governmental entity, and it has transferred possession and the right to use the property to a third party, the governmental entity will not be considered a "responsible party" merely by reason of its ownership of the facility. See also OPA § 1001(26), 104 Stat. at 488 (defining "owner or operator" to include "any person owning or operating such onshore facility or offshore facility").

²⁵OPA § 1001(32)(F), 104 Stat. 489.

²⁶OPA § 1002(a), 104 Stat. at 489.

²⁷Id.

²⁸OPA § 1001(17), 104 Stat. at 487.

²⁹In the Joint Explanatory Statement of the Committee of Conference considering the OPA, the Committee observes:

§ 1003 of the Act provides three limited defenses to liability. § 1002(c) also excludes certain "discharges" from the Act. Also, the costs and damages must "result from" the "incident."

The owner or operator will be liable for costs and damages unless they can prove:

- (1) The discharge was pursuant to a permit issued by Federal, State, or local law;³⁰
- (2) The costs or damages did not result from the discharge "incident."³¹
- (3) The discharge, and the resulting costs and damages, were caused solely by:
 - (a) An act of God;³²

The term 'liable' or 'liability' is taken from the Senate amendment and is to be construed to be the standard of liability which obtains under section 311 of the FWPCA for liability for removal costs and damages from discharges of oil. That standard of liability has been determined repeatedly to be strict, joint and several liability.

H.R. Conf. Rep. No. 101-653, 101st Cong., 2d Sess. 103 (1990).

³⁰OPA § 1002(c)(1), 104 Stat. at 490. Subsection (c) also excludes discharges from a "public vessel" and from an onshore facility which is subject to the Trans-Alaska Pipeline Authorization Act. OPA § 1002(a)(2) & (3), 104 Stat. at 490.

³¹"Incident" is defined as "any occurrence or series of occurrences having the same origin, involving one or more vessels, facilities, or any combination thereof, resulting in the discharge or substantial threat of discharge of oil." OPA § 1001(14), 104 Stat. at 487. The House Conference Report indicates: "'Incident' is defined to mean an occurrence or series of related occurrences because, as under other Federal law it is the intent of the Conferees that the entire series of events resulting in the spill of oil comprises one 'incident.'" H.R. Conf. Rep. No. 101-653, 101st Cong., 2d Sess. 102 (1990).

³²Act of God is defined as:

[A]n unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character the effects of which could not have been prevented or avoided by the exercise of due care or foresight; . . .

(b) An act of war; or

(c) An act or omission of a "third party."³³

However, the act of God, war, and third party defenses can be lost if the party fails to comply with reporting requirements and cooperate in the cleanup.³⁴ For purposes of governmental cleanup costs, these defenses are not available to the owner or operator of an "OCS facility or vessel;"³⁵ in such cases the owner or operator must pay:

[A]ll removal costs incurred by the United States

OPA § 1001(1), 104 Stat. at 486.

³³The "third party" defense is quite narrow. The "third party" cannot be an employee or agent of the owner or operator. Nor can the third party's act or omission occur in connection with any "contractual relationship" with the owner or operator. The only exception to this contractual relationship limitation is where the contract relates to the common carrier transportation of oil by rail. OPA § 1003(a)(3), 104 Stat. at 491. However, to be entitled to the third party defense, the owner or operator must prove that they:

(A) exercised due care with respect to the oil concerned, taking into consideration the characteristics of the oil and in light of all relevant facts and circumstances; and

(B) took precautions against foreseeable acts or omissions of any such third party and the foreseeable consequences of those acts or omissions; . . .

OPA § 1003(a)(3)(A) and (B), 104 Stat. at 491.

³⁴OPA § 1003(c), 104 Stat. at 491.

³⁵The Act defines "Outer Continental Shelf facility" to include:

[A]n offshore facility which is located, in whole or in part, on the Outer Continental Shelf and is or was used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil produced from the Outer Continental Shelf.

OPA § 1001(25), 104 Stat. at 488.

Government or any State or local official or agency in connection with a discharge or substantial threat of a discharge of oil from any Outer Continental Shelf facility or a vessel carrying oil as cargo from such facility³⁶

3. Recoverable Cleanup Costs and Damages

Under CERCLA, the government can recover its cleanup costs plus damages for natural resources that are injured due to a hazardous substance release.³⁷ A non-governmental litigant under CERCLA can recover only its cleanup costs.³⁸ The range of damages under the Oil Pollution Act of 1990 are much broader than those provided for under CERCLA. In addition to cleanup costs, the Act authorizes private parties to recover for the following:

- (1) Damages for injury to real or personal property, and "economic losses" resulting from the destruction of real or personal property, owned or leased by the claimant;³⁹
- (2) Damages for loss of profits or impairment of earning capacity due to injury or destruction to real or personal property, or natural resources;⁴⁰

³⁶OPA § 1004(c)(3), 104 Stat. at 492. The owner or operator has "absolute" liability in this situation; apparently there are no defenses. Nor is there any cap on the amount the owner or operator must pay in government cleanup costs.

³⁷CERCLA §107(a)(4)(A), (C), and (D), 42 U.S.C. § 9607(a)(4)(A), (C), and (D) (1989).

³⁸CERCLA § 107(a)(4)(B), 42 U.S.C. § 9607(a)(4)(B) (1989).

³⁹OPA § 1002(b)(2)(B), 104 Stat. at 490.

⁴⁰OPA § 1002(b)(2)(E), 104 Stat. at 490. The House Conference Report indicates:

Subsection (b)(2)(E) provides that any claimant may recover for loss of profits or impairment of earning capacity resulting from injury to property or natural resources. The claimant need not be the owner of the damaged property or resources to recover for lost profits or income. For example, a fisherman may recover lost income due to damaged fisheries resources, even though the fisherman does not own those resources.

H.R. Conf. Rep. No. 101-653, 101st Cong., 2d Sess. 103 (1990).

- (3) Damages for loss of "subsistence use" of natural resources by any claimant who makes such use of natural resources.⁴¹

However, a "claimant"⁴² cannot recover against the responsible party "to the extent that the incident is caused by the gross negligence or willful misconduct of the claimant."⁴³

In addition to cleanup costs and damages for injury to natural resources, the Act authorizes governmental parties⁴⁴ to recover for the following:

- (1) The cost of assessing damages to natural resources;⁴⁵
- (2) Damages equal to the "net loss of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources . . . ;"⁴⁶
- (3) Damages equal to the "net costs of providing increased or additional public services during or after removal activities, including protection from fire, safety, or

⁴¹OPA § 1002(b)(2)(C), 104 Stat. at 490.

⁴²The Act defines "claimant" as: "[A]ny person or government who presents a claim for compensation under this title." OPA § 1001(3), 104 Stat. at 486.

⁴³OPA § 1003(b), 104 Stat. at 491.

⁴⁴Governmental parties under the Act include the United States, individual states, and Indian tribes. In some instances a political subdivision of a State is included in the definition. OPA § 1002(b), 104 Stat. at 489. See also OPA § 1001(36), 104 Stat. at 489, defining "United States" and "State" to include the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Commonwealth of the Northern Marianas.

⁴⁵OPA § 1002(b)(2)(A), 104 Stat. at 490.

⁴⁶OPA § 1002(b)(2)(D), 104 Stat. at 490. These damages are also recoverable by affected cities, counties, and other state political subdivisions.

health hazards, caused by a discharge of oil" ⁴⁷

Under certain circumstances a "foreign claimant" can also recover against the responsible party. ⁴⁸

All claimants who are entitled to damages or reimbursement of cleanup costs can recover interest on their claim. ⁴⁹ Section 1005(b) of the Act states how interest will be calculated, how settlement offers will be handled, and the formula for determining the interest rate. ⁵⁰

4. Liability Limits

As with previous oil pollution acts, the OPA places a cap on the total amount a responsible party must pay as a result of a discharge. ⁵¹ However, the liability limit can be lost in the following situations:

- (1) If the incident was caused by the "gross negligence or

⁴⁷OPA § 1002(b)(2)(F), 104 Stat. at 490. These damages can also be recovered by cities, counties, and other state political subdivisions.

⁴⁸OPA § 1007, 104 Stat. at 496. When the claim is for injury to natural resources belonging to a foreign country, the "foreign trustee" can recover damages from the responsible party. OPA § 1002(b)(2)(A), 104 Stat. at 492. A "foreign claimant" can also seek cleanup costs and damages under the Act. A foreign claimant is defined to include a resident of a foreign country, the government of the foreign country, and its agencies and political subdivisions. OPA § 1007(c), 104 Stat. at 497. To be eligible for compensation under the Act, a treaty or executive agreement must exist between the United States and the claimant's country, or the Secretary of State certifies that the claimant's country provides a comparable remedy for United States claimants. OPA § 1007(a)(1), 104 Stat. 496-97.

⁴⁹OPA § 1005(a), 104 Stat. at 493.

⁵⁰OPA § 1005(b)(1), (2), and (4), 104 Stat. at 493-94.

⁵¹As with previous amendments to the oil pollution acts, the maximum liability is increased.

willful misconduct" of the responsible party;⁵²

- (2) If the incident was caused by the responsible party's⁵³ violation of "an applicable Federal safety, construction, or operating regulation" ⁵⁴
- (3) The responsible party fails to properly report the incident;⁵⁵
- (4) The responsible party fails to cooperate with the government in cleanup efforts;⁵⁶
- (5) The responsible party fails to comply with certain governmental orders under the Clean Water Act and the High Seas Act.⁵⁷

In certain situations, the liability limit will not apply. Interest on any claim "shall be paid without regard to any limitation of liability under section 1004."⁵⁸ Also, there is no limit to liability for governmental cleanup costs associated with an Outer Continental Shelf ("OCS") facility, or a vessel carrying oil as cargo from an OCS facility.⁵⁹

In those situations where the liability limit applies, the responsible party's maximum liability for cleanup costs and damages cannot exceed the following amounts:

Tank Vessel:⁶⁰

⁵²OPA § 1004(c)(1)(A), 104 Stat. at 492.

⁵³"Responsible party" for these purposes includes "an agent or employee of the responsible party, or a person acting pursuant to a contractual relationship with the responsible party" OPA § 1004(c)(1), 104 Stat. at 492.

⁵⁴OPA § 1004(c)(1)(B), 104 Stat. at 492.

⁵⁵OPA § 1004(c)(2)(A), 104 Stat. at 492.

⁵⁶OPA § 1004(c)(2)(B), 104 Stat. at 492.

⁵⁷OPA § 1004(c)(2)(C), 104 Stat. at 492.

⁵⁸OPA § 1004(b)(5)(A), 104 Stat. at 494.

⁵⁹OPA § 1004(c)(3), 104 Stat. at 492-93.

⁶⁰A "tank vessel" is defined as:

[A] vessel that is constructed or adapted to carry, or

The greater of \$1,200 per gross ton or--
If 3,000 gross tons or less: \$ 2,000,000;
If more than 3,000 gross tons: \$10,000,000.⁶¹

Other Vessels:

The greater of \$600 per gross ton or \$500,000.⁶²

Offshore Facilities:

The total of all cleanup costs plus \$75,000,000.⁶³

Onshore Facilities and Deepwater Ports:

\$350,000,000.⁶⁴

Outer Continental Shelf Facility or Vessel:⁶⁵

No limit on the amount of cleanup costs incurred by the United States Government or any state or local official or agency.⁶⁶

Subsection (d) of § 1004 permits the President, by regulation, to establish liability limits for onshore facilities that are less

that carries, oil or hazardous material in bulk as cargo or cargo residue, and that--

- (A) is a vessel of the United States;
 - (B) operates on the navigable waters; or
 - (C) transfers oil or hazardous material in a place subject to the jurisdiction of the United States;
- . . .

OPA § 1001(34), 104 Stat. at 489.

⁶¹OPA § 1004(a)(1), 104 Stat. at 492.

⁶²OPA § 1004(a)(2), 104 Stat. at 492.

⁶³OPA § 1004(a)(3), 104 Stat. at 492.

⁶⁴OPA § 1004(a)(4), 104 Stat. at 492.

⁶⁵This includes any "offshore facility" which is located, in whole or in part, on the Outer Continental Shelf. OPA § 1001(25), 104 Stat. at 488. An Outer Continental Shelf "vessel" is any vessel carrying oil as cargo from an OCS facility. OPA § 1004(c)(3), 104 Stat. at 492-93.

⁶⁶OPA § 1004(c)(3), 104 Stat. at 492-93.

than the \$350,000,000 figure. In establishing the lesser limit, the President must consider the "size, storage capacity, oil throughput, proximity to sensitive areas, type of oil handled, history of discharge, and other factors relevant to risks posed by the class or category of facility."⁶⁷ In no event can the limit be set at less than \$8,000,000.⁶⁸ All limits are subject to adjustment upward to reflect significant increases in the Consumer Price Index.⁶⁹ As noted previously, interest on cleanup costs and damages is not subject to the liability limits.⁷⁰

5. Leveraging Liability

Although the owner or operator of the facility will be initially responsible for cleanup costs and damages, they may be able to recover some or all of their outlay from the Oil Spill Liability Trust Fund⁷¹ or other persons who are "liable or potentially liable" under the Act "or another law."⁷² The responsible party can also use insurance and indemnity agreements to leverage the ultimate financial burden of its liability.⁷³

To be eligible for reimbursement from the Trust Fund, the responsible party must establish that it is entitled to a defense to liability under § 1003, or that it is entitled to a limitation of liability under § 1004.⁷⁴ In either event, the responsible party must comply with the claims procedure set out in § 1013 of the Act.⁷⁵ However, like CERCLA, most of the liability leveraging will take place through suits by the responsible party against

⁶⁷OPA § 1004(d)(1), 104 Stat. at 493.

⁶⁸Id. After conducting a study, the Secretary of the Coast Guard can by regulation reduce the liability limit for deepwater ports below the \$350,000,000 figure if the study finds the environmental risk posed by deepwater ports is not greater than at other ports. Any revised deepwater port liability limit cannot be less than \$50,000,000. OPA § 1004(d)(2), 104 Stat. at 493.

⁶⁹OPA § 1004(d)(4), 104 Stat. at 493.

⁷⁰OPA § 1005(b)(5)(A), 104 Stat. at 494.

⁷¹OPA § 1008(a), 104 Stat. at 497.

⁷²OPA § 1009, 104 Stat. at 497 (contribution).

⁷³OPA § 1010, 104 Stat. at 498.

⁷⁴OPA § 1008(a), 104 Stat. at 497.

⁷⁵OPA § 1013, 104 Stat. at 501.

third parties for contribution. Under the OPA the government, and injured claimants, look to the present owners and operators of the affected facility or vessel for compensation. Most of the finger pointing will probably take place between owners and operators.⁷⁶ A responsible party can also be a "claimant" under the Act. Section 1010(c) addresses this issue by providing that:

[N]othing in this Act . . . bars a cause of action that a responsible party subject to liability under this Act, or a guarantor, has or would have, by reason of subrogation or otherwise, against any person.⁷⁷

Therefore, an "owner" could, for example, make a claim for reimbursement and damages against the "operator" who may have been the actual cause of the discharge.⁷⁸ The owner and operator may also make claims against other persons that had a role in causing the incident.

Section 1009 of the Act addresses this issue by providing:

A person may bring a civil action for contribution against any other person who is liable or potentially liable under this Act or another law. The action shall be brought in accordance with section 1017.⁷⁹

The Joint Explanatory Statement of the Conference Committee suggests one scenario in which a contribution claim might arise by offering the following example:

The Conferees note that this section might come into play in an instance where more than one party is involved with a spill. For example, a spill may occur when oil is being transferred between a vessel and an onshore facility. If the discharge comes from the vessel, it is the vessel that will be the responsible party

⁷⁶When a vessel is involved, the responsible parties include any person owning, operating, "or demise chartering" the vessel. OPA § 1001(26)(A) and (32)(A), 104 Stat. at 488.

⁷⁷OPA § 1010(c), 104 Stat. at 498.

⁷⁸However, § 1003(b) would not permit the owner's claim if the incident was caused by the gross negligence or willful misconduct of the owner/claimant. OPA § 1003(b), 104 Stat. at 491.

⁷⁹OPA § 1009, 104 Stat. at 497-98. Pursuant to § 1017 a claim for contribution must be commenced within three years from the date of a judgment or settlement concerning cleanup costs and damages. OPA § 1017(f)(3), 104 Stat. at 505. Similar time limits apply to an action for subrogation. OPA § 1017(f)(4), 104 Stat. at 505.

Nevertheless, if action or omission of the onshore facility contributed to the discharge, the operation of this section or section 1015 on subrogation could result in the facility being held accountable financially in part or in whole.⁸⁰

In addition to a contribution claim, any party paying for cleanup costs or damages to a claimant "shall be subrogated to all rights, claims, and causes of action that the claimant has under any other law."⁸¹

In terms substantially similar to those in CERCLA, the OPA authorizes agreements to "insure, hold harmless, or indemnify a party to such agreement for any liability under this Act."⁸² Although liability cannot be "transferred" by agreement, the ultimate financial burden associated with liability can be allocated between the contracting parties.⁸³ However, for purposes of the Act, the owner or operator remains "liable" for the injury.⁸⁴ This simply means that if Company X is the owner or operator, and it has caused \$100,000,000 in cleanup costs and damages, injured parties can look to Company X for full compensation, regardless of any insurance or indemnity agreement Company X may have with other persons.

Some courts, interpreting a similar provision under CERCLA, have held that indemnity agreements between responsible parties are ineffective, relying upon CERCLA § 107(e)(2) which provides:

Nothing in this subchapter . . . shall bar a cause of action that an owner or operator or any other person subject to liability under this section . . . has or would have, by reason of subrogation or otherwise against any person.⁸⁵

However, such an approach fails to recognize that the statute only

⁸⁰H.R. Conf. Rep. No. 101-653, 101st Cong., 2d Sess. 103 (1990).

⁸¹OPA § 1015(a), 104 Stat. at 502.

⁸²OPA § 1010(a), 104 Stat. at 498. Compare CERCLA § 107(e)(1), 42 U.S.C. 9607(e)(1) (1989).

⁸³The allocation can be accomplished through insurance or indemnity agreements. OPA § 1010(a), 104 Stat. at 498.

⁸⁴OPA § 1010(b), 104 Stat. at 498. Compare CERCLA § 107(e)(1), 42 U.S.C. 9607(e)(1) (1989).

⁸⁵CERCLA § 107(e)(2), 42 U.S.C. 9607(e)(2) (1989).

provides that nothing contained in CERCLA will bar a cause of action. The plain language of CERCLA, and the OPA, suggests that a separate contract for indemnity between the parties could shift the financial burden for liability--between the parties to the contract.

The legislative history of the OPA is clear on the issue:

Section 102(f) of the Senate amendment provides that no indemnification, hold harmless or similar agreement or conveyance may transfer the liability established under the amendment. However, this does not preclude agreements where one party agrees to pay for all or part of the liability to which another party is subject under the amendment. In addition, the section provides that nothing in the amendment shall bar a cause of action that an owner or operator, or a guarantor, would have by reason of subrogation or other law against another person.

Section 1010 of the House bill is similar, except that it uses the term 'responsible party', rather than 'owner or operator'.

The Conference substitute accepts the House provision.⁸⁶

The scrutiny of such arrangements should focus on the terms of the contract and its viability under state law.

6. Financial Responsibility

Section 1016 of the Act imposes financial responsibility requirements on the owners and operators of vessels, offshore facilities, and deepwater ports. Noticeably absent from the requirement are "onshore" facilities.⁸⁷

7. State Authority Unaffected

The Act specifically preserves the right of states and their political subdivisions to impose additional liability and regulatory requirements.⁸⁸ The Act also preserves any rights injured parties may have under other state law, including state

⁸⁶H.R. Conf. Rep. No. 101-653, 101st Cong., 2d Sess. 103 (1990).

⁸⁷OPA § 1016, 104 Stat. at 502-04.

⁸⁸OPA § 1018(a), 104 Stat. at 505-06.

common law.⁸⁹

8. Reporting Requirements and Penalties

Section 311 of the Federal Water Pollution Control Act ("FWPCA") requires that:

Any person in charge of a vessel or of an onshore facility or an offshore facility shall, as soon as he has knowledge of any discharge of oil or a hazardous substance from such vessel or facility in . . . [excess of an EPA-established reportable quantity], immediately notify the appropriate agency of the United States Government of such discharge.⁹⁰

The EPA regulations indicate that a discharge must be immediately reported to the National Response Center at 800-424-8802.⁹¹ Section 4301 of the Oil Pollution Act amends § 311 of the FWPCA by increasing the penalties for a failure to report.⁹² Penalties for violation of § 311 of the FWPCA are increased and a detailed schedule of penalties are established for violation of the OPA's

⁸⁹OPA § 1018(a)(2), 104 Stat. at 506.

⁹⁰Federal Water Pollution Control Act ("FWPCA") § 311(b)(5), 33 U.S.C. § 1321(b)(5) (1989). The EPA has set the reportable quantity for oil as discharges that:

(a) Violate applicable water quality standards, or

(b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

40 C.F.R. §§ 110.3, 110.4, 110.5 (1990) (the "sheen test"). This same test is used to establish a violation of § 311 which prohibits "the discharge of oil . . . in such quantities as may be harmful" FWPCA § 311(b)(3), 33 U.S.C. § 1321(b)(3) (1989). See 40 C.F.R. § 110.6 (1990). Under the Oil Pollution Act of 1990 environmental injury is not a prerequisite for liability. If there is a discharge, or a threat of a discharge, the responsible party will be liable for cleanup costs and damages resulting from the incident.

⁹¹40 C.F.R. § 110.10 (1990).

⁹²OPA § 4301(a), 104 Stat. at 533.

provisions.⁹³

9. Potential Impact on Routine Onshore Operations

Attempts to use CERCLA to address petroleum contamination, particularly from leaking underground storage tanks, have been unsuccessful to date.⁹⁴ The "petroleum exclusion" under CERCLA has prevented litigants from making use of the CERCLA liability regime. Since the Oil Pollution Act of 1990 defines "oil" as including petroleum substances not covered by CERCLA,⁹⁵ it is likely that litigants will try to use the OPA to deal with leaking underground storage tank claims. Similarly, litigants may try to use the OPA to deal with routine exploration and production disputes. For example, the disgruntled surface owner may argue that oil on the ground near a pump site or tank battery is a "discharge" requiring "removal" and the payment of damages.

The major limitation in the OPA that prevents it from becoming a full-blown CERCLA for oil is the requirement that the discharge be "into or upon the navigable water."⁹⁶ As in the Federal Water Pollution Control Act,⁹⁷ the OPA defines "navigable waters" to mean "waters of the United States."⁹⁸ For purposes of § 311 of the FWPCA, the EPA has defined waters of the United States broadly to include:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(b) Interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

⁹³OPA §§ 4301(b), (c), 4302, and 4303, 104 Stat. at 533-40.

⁹⁴See generally Section III.B.1. of this Report at page 48.

⁹⁵OPA § 1001(23), 104 Stat. at 487,

⁹⁶OPA § 1002(a), 104 Stat. at 489.

⁹⁷FWPCA § 502(7), 33 U.S.C. § 1362 (1989).

⁹⁸OPA § 1001(21), 104 Stat. at 487.

(1) That are or could be used for interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;

(3) That are used or could be used for industrial purposes by industries in interstate commerce;⁹⁹

(d) All impoundments of waters otherwise defined as navigable waters under this section;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this section, including adjacent wetlands;

(f) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this section: Provided, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States; . . .¹⁰⁰

Such a broad definition, if applied to the OPA, could impose liability for oil discharges onto what appears to be dry land. A more difficult question is whether the definition could apply to a discharge, or threat of a discharge, into groundwater. Although it is clear that groundwater is not "navigable," it is used in interstate commerce for agriculture, other industries, and to supply major commerce centers: cities and towns. Courts have concluded that the word "navigable" in the water pollution context has nothing to do with whether you can float a boat.¹⁰¹ Instead, the term considers whether the polluting activity can impact a water source that has some connection to interstate commerce.¹⁰²

Although the EPA may not be inclined to push the definition to the limit, the OPA now invites private litigants, "claimants" for cleanup costs and damages, to use the OPA to obtain compensation. The strict joint and several liability standard created by the OPA will be appealing to private litigants who would otherwise have to rely upon state common law principles to press their claims. The OPA may also permit recovery that is otherwise

⁹⁹Perhaps irrigation for farming.

¹⁰⁰40 C.F.R. § 110.1(a)-(f) (1990).

¹⁰¹See United States v. Ashland Oil & Transportation Co., 504 F.2d 1317 (6th Cir. 1974).

¹⁰²Id. See also Quivira Mining Co. v. United States, 765 F.2d 126 (10th Cir. 1985).

barred by contract under state law. For example, many oil and gas leases compensate the lessor only for damages to "growing crops." Artful use of the OPA could impose liability on the lessee for all damages to the property associated with a discharge of oil. More importantly, it would mandate a cleanup of the problem--which in many cases can be much more costly than any damages resulting from the discharge. I predict that under the OPA we will see an entirely new wave of litigation, similar to the current tidal wave of CERCLA litigation.

B. Clean Air Act Amendments of 1990

After nearly a decade of attempts to revise the Clean Air Act of 1977,¹⁰³ Congress passed Senate Bill 1630 to substantially amend the Clean Air Act. On November 15, 1990 President Bush signed Senate Bill 1630 into law as the Clean Air Act Amendments of 1990 ("CAAA").¹⁰⁴ The CAAA is composed of eleven statutory titles:

Title I	Provisions for Attainment and Maintenance of National Ambient Air Quality Standards
Title II	Provisions Relating to Mobile Sources
Title III	Hazardous Air Pollutants
Title IV	Acid Deposition Control
Title V	Permits
Title VI	Stratospheric Ozone Protection
Title VII	Provisions Relating to Enforcement
Title VIII	Miscellaneous Provisions
Title IX	Clean Air Research
Title X	Disadvantaged Business Concerns
Title XI	Clean Air Employment Transition Assistance

¹⁰³Clean Air Act, 42 U.S.C. §§ 7401 to 7642 (1989).

¹⁰⁴Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (1990).

1. Permits Under the CAAA

The CAAA adds a permitting program to the Clean Air Act similar to the Federal Water Pollution Control Act (FWPCA) permit system.¹⁰⁵ Once the program is phased in, designated air pollution sources must obtain a permit to operate their facilities.¹⁰⁶ The CAAA contains a detailed list of items state permit programs must include.¹⁰⁷ Among the listed items are the following requirements:

- (1) Monitoring
- (2) Self-Reporting of Violations
- (3) Payment of an Annual Fee¹⁰⁸
- (4) Public Notice of Permit Applications
- (5) Public Comment and Hearing on Applications
- (6) Ability to Revise Permits to Add New Requirements¹⁰⁹
- (7) Source-Prepared Plan for Compliance¹¹⁰
- (8) Annual Compliance Certification by Source¹¹¹

State permit programs can authorize issuance of permits for up to

¹⁰⁵Under the FWPCA, subject to specified exceptions, a permit is required for any person to lawfully discharge a pollutant into the waters of the United States. FWPCA § 301(a), 33 U.S.C. § 1311 (a) (1989). The FWPCA permit program is governed by FWPCA § 402, 33 U.S.C. § 1342 (1989) (establishing the "National Pollutant Discharge Elimination System" and the resulting "NPDES" permit).

¹⁰⁶The Administrator of the EPA has until November 16, 1991 to adopt regulations detailing the permit program requirements. CAAA § 502(b), 104 Stat. at 2636. Prior to November 16, 1993 each state must develop a permit program that complies with the CAAA and submit it to the Administrator for approval. CAAA § 502(d), 104 Stat. at 2639.

¹⁰⁷CAAA § 502(b), 104 Stat. at 2636-39.

¹⁰⁸The fee must be sufficient to cover all direct and indirect costs associated with developing and administering the permit program. The statute uses \$25 per ton of regulated pollutant as an average base figure for a permit fee; this figure can be adjusted up or down to reflect permit program costs. CAAA § 502 (b)(3), 104 Stat. at 2636-37.

¹⁰⁹CAAA § 502(b), 104 Stat. at 2636-39.

¹¹⁰CAAA § 503(b)(1), 104 Stat. at 2641.

¹¹¹CAAA § 503(b)(2), 104 Stat. at 2641.

five years.¹¹² However, the state must retain adequate authority to terminate, modify, revoke, and reissue permits. The state must have authority to collect up to \$10,000 per day per violation as civil penalties and to impose criminal penalties in appropriate cases.¹¹³ Any proposed permit will be subject to veto by the EPA if the Administrator "objects" to issuance of the permit.¹¹⁴

Section 504 of the CAAA specifies how the permit program requirements will be incorporated into individual permits. For example, § 504(a) provides:

CONDITIONS.--Each permit . . . shall include enforceable emission limitations and standards, a schedule of compliance, a requirement that the permittee submit . . . the results of any required monitoring, and such other conditions as are necessary to assure compliance with . . . [the Act and the applicable state implementation plan].¹¹⁵

This section also provides for "general permits" and permits for "temporary sources." The permitting authority is given the discretion to issue a general permit "covering numerous similar sources." However, any source eligible for coverage by a general permit must still apply for a permit under § 503.¹¹⁶ The permitting authority would then determine whether the applicant's activities are covered by a general permit. The temporary source permit procedure is used for sources that move. The permit must contain provisions that will ensure compliance at all authorized locations.¹¹⁷

Perhaps the most significant impact of the CAAA permit requirements are the thousands of previously unregulated sources that will be required to obtain permits. Once the permit programs are put into place, permits must be obtained for sources that emit, or have the potential to emit, the following volumes and types of

¹¹²However, any "major source" permit with a term of three or more years can be revised to incorporate standards and regulations promulgated after the permit is issued. CAAA § 502(b)(9), 104 Stat. at 2638.

¹¹³CAAA § 502(b)(5)(E), 104 Stat. at 2638.

¹¹⁴CAAA § 502(b)(5)(F), 104 Stat. at 2638; CAAA § 505(b), 104 Stat. at 2643-44.

¹¹⁵CAAA § 504(a), 104 Stat. at 2642.

¹¹⁶CAAA § 504(d), 104 Stat. at 2642.

¹¹⁷CAAA § 504(e), 104 Stat. at 2642-43.

pollutants:

- (1) 100 tons per year of any air pollutant.¹¹⁸
- (2) 50 tons per year of volatile organic compounds if the source is located in a "serious area" for ozone nonattainment.¹¹⁹
- (3) 25 tons per year of volatile organic compounds if the source is located in a "severe area" for ozone nonattainment.¹²⁰
- (4) 10 tons per year of volatile organic compounds if the source is located in an "extreme area" for ozone nonattainment.¹²¹
- (5) 50 tons per year of carbon monoxide if the source is located in a "serious area" for carbon monoxide nonattainment (where stationary sources contribute significantly to carbon monoxide emissions).¹²²
- (6) 70 tons per year of PM-10¹²³ if the source is located in a "serious area" for particulate matter nonattainment.¹²⁴
- (7) 10 tons per year of any single hazardous air pollutant.¹²⁵
- (8) 25 tons per year of any combination of

¹¹⁸CAAA § 501(2)(B), 104 Stat. at 2635; Clean Air Act § 302 (j), 42 U.S.C. § 7602 (1989).

¹¹⁹CAAA § 182(c), 104 Stat. at 2431.

¹²⁰CAAA § 182(d), 104 Stat. at 2436-37.

¹²¹CAAA § 182(e), 104 Stat. at 2438.

¹²²CAA § 187(c)(1), 104 Stat. at 2456-57.

¹²³PM-10 is defined as "particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers" CAAA § 108(j), 104 Stat. at 2468.

¹²⁴CAAA § 189(b)(3), 104 Stat. at 2461.

¹²⁵CAAA § 301, 104 Stat. at 2531 (amending § 112(a)(1) of the Clean Air Act).

hazardous air pollutants.¹²⁶

- (9) Non-major sources of hazardous air pollutants, called "area sources," designated by the Administrator pursuant to § 112(c)(3) of the Clean Air Act as amended.¹²⁷
- (10) Any source subject to sulfur dioxide or nitrogen oxide emission reduction requirements or limitations under Title IV Acid Deposition Control.¹²⁸
- (11) Any other stationary source in a category designated by the Administrator.¹²⁹

The CAAA authorizes any state, or interstate authority, to establish additional permit requirements which are "not inconsistent with" the Act.¹³⁰

2. Hazardous Air Pollutants

Prior to the CAAA only eight air pollutants had been designated as hazardous under § 112 of the Clean Air Act.¹³¹ The portion of the CAAA that will have the most wide-ranging impact on the regulated community, and the energy industry, is Title III

¹²⁶Id.

¹²⁷CAAA § 301, 104 Stat. at 2537 (amending § 112(c)(3) of the Clean Air Act).

¹²⁸CAAA § 402, 104 Stat. at 2585. Generally these are fossil fuel-fired combustion devices that serve a generator with a nameplate capacity in excess of 25MWe. The CAAA also lists certain "affected units" subject to sulfur dioxide emission limitation. CAAA § 404(a), Table A, 104 Stat. at 2597-2601. Title IV of the CAAA, addressing acid deposition control, provides for a special permit program at § 408, 104 Stat. at 2616.

¹²⁹CAAA § 502(a), 104 Stat. at 2635.

¹³⁰CAAA § 506(a), 104 Stat. at 2645.

¹³¹CAA § 112(b), 42 U.S.C. § 7412 (1989) (National Emission Standards for Hazardous Air Pollutants--"NESHAPS"). The EPA's list is found at 40 C.F.R. § 61.01 (1990) and includes: asbestos, benzene, beryllium, coke oven emissions, inorganic arsenic, mercury, radionuclides, and vinyl chloride.

which amends § 112 of the Clean Air Act.¹³² The major impacts will come from five new regulatory requirements:

(1) The Act adds 189 substances and compounds that are designated hazardous air pollutants.¹³³ A table of the Congressionally-listed hazardous air pollutants can be found at page 28 of this Report.

(2) The Act provides for the regulation of new and existing sources that emit relatively small quantities of listed hazardous air pollutants.¹³⁴

(3) The Act specifies the level of emission limitations that must be achieved by each regulated source.¹³⁵

(4) The Act creates a schedule for administrative action and various "hammer" provisions to ensure the Administrator acts in a timely fashion.¹³⁶

¹³²CAAA § 301, 104 Stat. at 2531-74.

¹³³CAAA § 301, 104 Stat. at 2532-35 (amending CAA § 112(b)).

¹³⁴CAAA § 301, 104 Stat. at 2531 (amending CAA § 112(a)(1) and § 112(a)(2) defining "major source" and "area source"). The Administrator is required to identify categories of polluting sources for regulation. See CAAA § 301, 104 Stat. at 2537 (amending CAA § 112(c)).

¹³⁵CAAA § 301, 104 Stat. at 2539 (amending CAA § 112(d)).

¹³⁶For example, new § 112(e) establishes a timetable for establishing emission standards for categories of sources identified under § 112(c); subsection (c) also contains a timetable for administrative action. CAAA § 301, 104 Stat. at 2542-43 (§ 112(e)); 104 Stat. at 2537-39 (§ 112(f)).

An example of a "hammer" provision is CAAA § 301, 104 Stat. at 2551 (adding § 112(j)(2)), which states:

(2) FAILURE TO PROMULGATE A STANDARD.--In the event that the Administrator fails to promulgate a standard for a category or subcategory of major sources by the date established . . . [by the CAAA], the owner or operator of any major source in such category or subcategory shall submit a permit application under paragraph (3) and such owner or operator shall also comply with paragraphs (5) and (6).

. . . .

CAS #	Chemical Name	CAS #	Chemical Name	CAS #	Chemical Name
75070	Acetaldehyde	68122	Dimethyl formamide	82688	Pentachloronitrobenzene (Quintobenzene)
60355	Acetamide	57147	1,1-Dimethyl hydrazine	87865	Pentachlorophenol
75058	Acetonitrile	131113	Dimethyl phthalate	108952	Phenol
98862	Acetophenone	77781	Dimethyl sulfate	106503	p-Phenylenediamine
53963	2-Acetylaminofluorene	534521	4,6-Dinitro-o-cresol, and salts	75445	Phosgene
107028	Acrolein	51285	2,4-Dinitrophenol	7803512	Phosphine
79061	Acrylamide	121142	2,4-Dinitrotoluene	7723140	Phosphorus
79107	Acrylic acid	123911	1,4-Dioxane (1,4-Diethyleneoxide)	85449	Phthalic anhydride
107131	Acrylonitrile	122667	1,2-Diphenylhydrazine	1336363	Polychlorinated biphenyls (Aroclors)
107051	Allyl chloride	106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	1120714	1,3-Propane sultone
92671	4-Aminobiphenyl	106887	1,2-Epoxybutane	57578	beta-Propiolactone
62533	Aniline	140885	Ethyl acrylate	123386	Propionaldehyde
90040	o-Anisidine	100414	Ethyl benzene	114261	Propoxur (Baygon)
1332214	Asbestos	51796	Ethyl carbamate (Urethane)	78875	Propylene dichloride (1,2-Dichloropropane)
71432	Benzene (including from gasoline)	75003	Ethyl chloride (Chloroethane)	75569	Propylene oxide
92875	Benzidine	106934	Ethylene dibromide (Dibromoethane)	75558	1,2-Propylenimine (2-Methyl aziridine)
98077	Benzotrithloride	107062	Ethylene dichloride (1,2-Dichloroethane)	91225	Quinoline
100447	Benzyl chloride	107211	Ethylene glycol	106514	Quinone
92524	Biphenyl	151564	Ethylene imine (Aziridine)	100425	Styrene
117817	Bis(2-ethylhexyl) phthalate (DEHP)	75218	Ethylene oxide	96093	Styrene oxide
542881	Bis(chloromethyl)ether	96457	Ethylene thiourea	1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
75252	Bromoform	75343	Ethylidene dichloride (1,1-Dichloroethane)	79345	1,1,2,2-Tetrachloroethane
106990	1,3-Butadiene	50000	Formaldehyde	127184	Tetrachloroethylene (Perchloroethylene)
156627	Calcium cyanamide	76448	Heptachlor	7550450	Titanium tetrachloride
105602	Caprolactam	118741	Hexachlorobenzene	108883	Toluene
133062	Captan	87683	Hexachlorobutadiene	95807	2,4-Toluene diamine
63252	Carbaryl	77474	Hexachlorocyclopentadiene	584849	2,4-Toluene diisocyanate
75150	Carbon disulfide	67721	Hexachloroethane	95534	o-Toluidine
56235	Carbon tetrachloride	822060	Hexamethylene-1,6-diisocyanate	8001352	Toxaphene (chlorinated camphene)
463581	Carbonyl sulfide	680319	Hexamethylphosphoramide	120821	1,2,4-Trichlorobenzene
120809	Catechol	110543	Hexane	79005	1,1,2-Trichloroethane
133904	Chloramben	302012	Hydrazine	79016	Trichloroethylene
57749	Chlordane	7847010	Hydrochloric acid	95954	2,4,5-Trichlorophenol
7782505	Chlorine	7664393	Hydrogen fluoride (hydrofluoric acid)	88062	2,4,6-Trichlorophenol
79118	Chloroacetic acid	123319	Hydroquinone	121448	Triethylamine
532274	2-Chloroacetophenone	78591	Isophorone	1582098	Trifluralin
108907	Chlorobenzene	58899	Lindane (all isomers)	540841	2,2,4-Trimethylpentane
510156	Chlorobenzilate	108316	Maleic anhydride	108054	Vinyl acetate
67683	Chloroform	67561	Methanol	593602	Vinyl bromide
107302	Chloromethyl methyl ether	72435	Methoxychlor	75014	Vinyl chloride
126998	Chloroprene	74839	Methyl bromide (Bromomethane)	75354	Vinylidene chloride (1,1-Dichloroethylene)
1319773	Cresols/Cresylic acid (isomers and mixture)	74873	Methyl chloride (Chloromethane)	1330207	Xylenes (isomers and mixture)
95487	o-Cresol	71556	Methyl chloroform (1,1,1-Trichloroethane)	95476	o-Xylenes
108394	m-Cresol	78933	Methyl ethyl ketone (2-Butanone)	108383	m-Xylenes
106445	p-Cresol	60344	Methyl hydrazine	106423	p-Xylenes
98828	Cumene	74884	Methyl iodide (Iodomethane)	0	Antimony compounds
94757	2,4-D, salts and esters	108101	Methyl isobutyl ketone (Hexone)	0	Arsenic compounds (inorganic including arsine)
3547044	DDE	624839	Methyl isocyanate	0	Beryllium compounds
334883	Diazomethane	80626	Methyl methacrylate	0	Cadmium compounds
132649	Dibenzofurans	1634044	Methyl tert butyl ether	0	Chromium compounds
96128	1,2-Dibromo-3-chloropropane	101144	4,4-Methylene bis(2-chloroaniline)	0	Cobalt compounds
84742	Dibutylphthalate	75092	Methylene chloride (Dichloromethane)	0	Coke oven emissions
106467	1,4-Dichlorobenzene(p)	101688	Methylene diphenyl diisocyanate (MDI)	0	Cyanide compounds ¹
91941	3,3-Dichlorobenzidine	101779	4,4'-Methylenedianiline	0	Glycol ethers ²
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	91203	Naphthalene	0	Lead compounds
542756	1,3-Dichloropropene	98953	Nitrobenzene	0	Manganese compounds
62737	Dichlorvos	92933	4-Nitrobiphenyl	0	Mercury compounds
111422	Diethanolamine	100027	4-Nitrophenol	0	Mineral fibers ³
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)	79489	2-Nitropropane	0	Nickel compounds
64675	Diethyl sulfate	684935	N-Nitroso-N-methylurea	0	Polycyclic organic matter ⁴
119904	3,3-Dimethoxybenzidine	62759	N-Nitrosodimethylamine	0	Radionuclides (including radon) ⁵
60117	Dimethyl aminoazobenzene	59892	N-Nitrosomorpholine	0	Selenium compounds
119937	3,3-Dimethyl benzidine	56382	Parathion		
79447	Dimethyl carbamoyl chloride				

(5) EMISSION LIMITATION.--The permit shall . . . contain emission limitations for the hazardous air pollutants subject to regulation under this section and emitted by the source that the Administrator (or the State) determines on a case-by-case basis, to be equivalent to the limitation that would apply to such source if an emission standard had been promulgated in a timely manner under subsection (d).

(5) The Act provides sources incentives for voluntary early reductions of hazardous air pollutants.¹³⁷

a. Sources Subject to the Act

The CAAA mandates the control of all "major" and "area" sources of hazardous air pollutants.¹³⁸ "Major sources" include any stationary source or group of stationary sources that emits, or has the potential to emit, the following hazardous air pollutant volumes:

10 tons per year or more of any single pollutant; or

25 tons per year or more of any combination of pollutants.¹³⁹

The Administrator can establish a lesser quantity to trigger major

¹³⁷CAAA § 301, 104 Stat. at 2546-47 (adding § 112(i)(5)). New § 112(i)(5) provides, in part:

(i) SCHEDULE FOR COMPLIANCE--

(5) EARLY REDUCTION.--

(A) The Administrator . . . shall issue a permit allowing an existing source, for which the owner or operator demonstrates that the source has achieved a reduction of 90 per centum or more in emissions of hazardous air pollutants (95 per centum in the case of hazardous air pollutants which are particulates) from the source, to meet an alternative emission limitation . . . for a period of 6 years from the compliance date for the otherwise applicable standard, provided that such reduction is achieved before the otherwise applicable standard . . . is first proposed.

(B) An existing source which achieves the reduction . . . after the proposal of an applicable standard but before January 1, 1994, may qualify . . . if the source makes an enforceable commitment to achieve such reduction before the proposal of the standard.

¹³⁸CAAA § 301, 104 Stat. at 2539 (amending CAA § 112(d)).

¹³⁹CAAA § 301, 104 Stat. at 2531 (amending CAA § 112(a)).

source treatment if warranted by the nature of the pollutant.¹⁴⁰ The Act also encompasses all non-major sources with the regulation of "area sources."¹⁴¹ The Administrator must regulate:

[E]ach category . . . of area sources which the Administrator finds presents a threat of adverse effects to human health or the environment (by such sources individually or in the aggregate) warranting regulation under this section.¹⁴²

By November 15, 1995 the Administrator must list for regulation sufficient categories of area sources to control 90% of the area source emissions for the 30 hazardous air pollutants that present the greatest risk to human health in urban areas. Once the sources are listed, the Administrator will have until November 15, 2000 to regulate the sources.¹⁴³

Oil and gas wells, and pipeline facilities, receive special treatment under the Act. CAAA § 301, adding § 112(n)(4) to the Clean Air Act, provides:

(A) Notwithstanding . . . [the definition of major source and area source], emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (and its associated equipment), such emissions shall not be aggregated for any purpose under this section.

¹⁴⁰Id.

¹⁴¹CAAA § 301, 104 Stat. at 2531 (amending CAA § 112(a)) provides:

(2) AREA SOURCE.--The term 'area source' means any stationary source of hazardous air pollutants that is not a major source. For purposes of this section, the term 'area source' shall not include motor vehicles or nonroad vehicles subject to regulation under title II.

¹⁴²CAAA § 301, 104 Stat. at 2537 (amending CAA § 112(c)).

¹⁴³Id. See also CAAA § 301, 104 Stat. at 2552-54 (adding § 112(k)), establishing an "Area Source Program" and strategy to reduce the incidence of cancer "attributable to exposure to hazardous air pollutants emitted by stationary sources of not less than 75 per centum" CAAA § 301, 104 Stat. at 2553.

(B) The Administrator shall not list oil and gas production wells (with its associated equipment) as an area source category under subsection (c), except that the Administrator may establish an area source category for oil and gas production wells located in any metropolitan statistical area . . . with a population in excess of 1 million¹⁴⁴

The Act also provides for a study of hydrogen sulfide emissions associated with the extraction of oil and gas and authorizes the Administrator to develop a control strategy to protect human health and the environment.¹⁴⁵

The Act also adds a new program that will impact any "stationary source" that deals with hazardous substances. CAAA § 301 adds § 112(r) to the Clean Air Act which establishes an "accidental release" program for emissions of hazardous substances.¹⁴⁶ The Administrator is directed to "list" substances that, in the case of an accidental release, may cause serious adverse effects to human health or the environment.¹⁴⁷ When the substance is listed, the Administrator must establish a "threshold quantity" of each substance that will trigger a regulatory response when accidentally released.¹⁴⁸ The program is completed with authority to promulgate regulations to prevent accidental releases of the regulated substances.¹⁴⁹

b. Levels of Control

Departing somewhat from prior legislative approaches, the CAAA specifically states the level of control required of regulated sources. CAAA § 301, amending § 112(d) of the Clean Air Act, states that emission standards must require "the maximum reduction in emissions . . . (including a prohibition on such emissions, where achievable) that the Administrator . . . determines is achievable for new or existing sources"¹⁵⁰ However, the statute continues by establishing a formula for how this "maximum

¹⁴⁴CAAA § 301, 104 Stat. at 2559-60.

¹⁴⁵CAAA § 301, 104 Stat. at 2560 (adding § 112(n)(5)).

¹⁴⁶CAAA § 301, 104 Stat. at 2563-73 (adding § 112(r)).

¹⁴⁷CAAA § 301, 104 Stat. at 2564 (adding § 112(r)(3)).

¹⁴⁸CAAA § 301, 104 Stat. at 2565 (adding § 112(r)(5)).

¹⁴⁹CAAA § 301, 104 Stat. at 2570 (adding § 112(r)(7)).

¹⁵⁰CAAA § 310, 104 Stat. at 2539 (amending CAA § 112(d)(2)).

achievable control technology" ("MACT") will be determined by the Administrator:

The maximum degree of reduction in emissions that is deemed achievable for new sources¹⁵¹ in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards . . . for existing sources¹⁵² . . . may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than:

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources . . . [excluding from consideration certain existing sources that have upgraded their emission controls] . . . , or

(B) the average emission limitation achieved by the best performing 5 sources . . . in the category or subcategory for categories or subcategories with fewer than 30 sources.¹⁵³

Section (i) of the new § 112 requires pre-construction approval for new sources and provides for a compliance schedule for existing sources.¹⁵⁴ The Act also addresses the impact of facility modifications which may result in a change in the mix of hazardous emissions.¹⁵⁵ If an existing source reduces its hazardous air pollutant emissions by 90%, using a "base year not earlier than . . . 1987"¹⁵⁶ to calculate the reduction, the existing source can avoid additional federal controls "for a period of 6 years from the

¹⁵¹The CAAA defines "new source" as: "[A] stationary source the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emission standard applicable to such source." CAAA § 301, 104 Stat. at 2531-31 (amending CAA § 112(a)).

¹⁵²The CAAA defines "existing source" as "any stationary source other than a new source." CAAA § 301, 104 Stat. at 2532 (amending CAA § 112(a)).

¹⁵³CAAA § 301, 104 Stat. at 2540 (amending CAA § 112(d)).

¹⁵⁴CAAA § 301, 104 Stat. at 2546-47 (adding § 112(i)).

¹⁵⁵CAAA § 301, 104 Stat. at 2545-46 (adding § 112(g)).

¹⁵⁶CAAA § 301, 104 Stat. at 2548 (adding § 112(i)(5)(C)).

compliance date of the otherwise applicable standard" ¹⁵⁷ To be eligible for this "early reduction" benefit, the source must either achieve the 90% reduction, or make an enforceable commitment to achieve the reduction, within stated time frames. ¹⁵⁸

The Act provides for a second phase of emission limitations to address risks to public health that remain after applying MACT to stationary sources. Section (f) of the new § 112 requires the Administrator to investigate and report on residual risks and recommend legislation to Congress to address such risks. ¹⁵⁹ If Congress fails to act on any recommendation made by the Administrator, the Administrator must adopt additional standards for regulated sources that:

[P]rovide an ample margin of safety to protect public health in accordance with . . . [the original version of § 112] or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. Emission standards promulgated under this subsection shall provide an ample margin of safety to protect public health . . . , unless the Administrator determines that a more stringent standard is necessary to prevent . . . an adverse environmental effect. ¹⁶⁰

However, if the existing standard concerns a source that emits "a known, probable or possible carcinogen," and the existing standard does not reduce the lifetime excess cancer risk to the most exposed individual to below 1 in 1,000,000, the Administrator must address the residual risk under subsection (f). ¹⁶¹

3. Nonattainment of Ambient Air Quality Standards

Titles I and II of the CAAA address the failure of many areas to attain the National Ambient Air Quality Standards ("NAAQS") for ozone, carbon monoxide, particulate matter, sulfur oxides, nitrogen dioxide, and lead. Title I addresses emissions from stationary sources and Title II addresses mobil source emissions.

¹⁵⁷CAAA § 301, 104 Stat. at 2547-48 (adding § 112(5)(A)). The text of this section is reproduced in part at footnote 137 of this Report.

¹⁵⁸See footnote 137 of this Report.

¹⁵⁹CAAA § 301, 104 Stat. at 2543 (adding § 112(f)(1)).

¹⁶⁰CAAA § 301, 104 Stat. at 2543-44 (adding § 112(f)(2)(A)).

¹⁶¹Id.

a. Title I - Stationary Sources

Title I retains the Clean Air Act approach to stationary sources. Areas are designated attainment, nonattainment, or unclassifiable. State Implementation Plans ("SIPs") are prepared to obtain and maintain the NAAQS by incorporating the regulatory requirements of the CAAA. The new program requirements are found in various "Subparts" to Title I that address pollutant-specific problems.

The ozone nonattainment program¹⁶² divides the United States into five categories of nonattainment: Marginal, Moderate, Serious, Severe, and Extreme.¹⁶³ Compliance deadlines and regulatory requirements vary depending upon the category of nonattainment.¹⁶⁴ For example, the compliance deadline in a "Marginal" ozone nonattainment area is November 16, 1993; the deadline in an "Extreme" area is November 16, 2010.¹⁶⁵ In a "Marginal" area a source of volatile organic compounds does not become subject to regulation unless it emits 100 tons per year; the same source in an "Extreme" area would be subject to control if it emits 10 tons per year.¹⁶⁶ The regulatory requirements increase as the area's level of nonattainment increases. Escalating controls depending upon the severity of nonattainment are also employed in the carbon monoxide program¹⁶⁷ and the particulate nonattainment program.¹⁶⁸ For these programs nonattainment areas are classified as either "Moderate" or "Serious."¹⁶⁹ Subpart 5 of the CAAA provides for some comparatively modest requirements for areas that are designated nonattainment for

¹⁶²CAAA Subpart 2--Additional Provisions for Ozone Nonattainment Areas, 104 Stat. at 2423-52.

¹⁶³CAAA § 181(a), Table 1, 104 Stat. at 2423.

¹⁶⁴Id.

¹⁶⁵Id.

¹⁶⁶CAAA § 182(e), 104 Stat. at 2438.

¹⁶⁷CAAA Subpart 3--Additional Provisions for Carbon Monoxide Nonattainment Areas, 104 Stat. at 2452-58.

¹⁶⁸CAAA § 188(a), 104 Stat. at 2458-59.

¹⁶⁹CAAA § 186(a), Table 3, 104 Stat. at 2452 (carbon monoxide); CAAA § 188(a), 104 Stat. at 2458-59 (particulate matter).

sulfur oxides, nitrogen dioxide, or lead.¹⁷⁰

b. Title II - Mobile Sources

Title II of the CAAA¹⁷¹ strengthens controls on motor vehicles by employing a range of phased tailpipe emission standards,¹⁷² controls on evaporative emissions,¹⁷³ and requiring the sale of reformulated gasoline and oxygenated fuels¹⁷⁴ in certain nonattainment areas.

4. New Programs to Address New Problems

Title IV addresses acid deposition problems primarily by placing greater sulfur dioxide emission limitations on existing major fossil fuel-burning power plants.¹⁷⁵ The Act also requires a reduction of nitrogen oxides¹⁷⁶ and establishes an innovative but intricate sulfur dioxide "allowance program."¹⁷⁷ A second phase of sulfur dioxide requirements take effect after January 1, 2000.¹⁷⁸ Title IV also contains its own permit section.¹⁷⁹

¹⁷⁰CAAA Subpart 5--Additional Provisions for Areas Designated Nonattainment for Sulfur Oxides, Nitrogen Dioxide, or Lead, 104 Stat. at 2463-68.

¹⁷¹CAAA Title II--Provisions Relating to Mobile Sources, 104 Stat. at 2471-2531.

¹⁷²CAAA § 201, 104 Stat. at 2472 (heavy duty trucks); § 203, 104 Stat. at 2474 (motor vehicles).

¹⁷³CAAA § 202, 104 Stat. at 2473 (onboard vapor recovery requirements during refueling); § 205, 104 Stat. at 2480 (evaporative emissions).

¹⁷⁴CAAA § 219, 104 Stat. at 2492.

¹⁷⁵CAAA § 404(a), 104 Stat. at 2592-93 ("Phase I Sulfur Dioxide Requirements"); see also Table A--Affected Sources and Units in Phase I and Their Sulfur Dioxide Allowances," 104 Stat. at 2597-2601.

¹⁷⁶CAAA § 407, 104 Stat. at 2613-15.

¹⁷⁷CAAA § 403, 104 Stat. at 2589-92.

¹⁷⁸CAAA § 405, 104 Stat. at 2605-13.

¹⁷⁹CAAA § 408, 104 Stat. at 2616-19.

The major regulatory technique employed by Title VI concerning stratospheric ozone protection is a phase-out of the manufacture and use of ozone-depleting substances.¹⁸⁰ The Act also requires the Administrator to adopt regulations regarding the labeling,¹⁸¹ recycling, and disposal of ozone-depleting substances.¹⁸²

5. Enforcement and Special Oil & Gas Provisions

Title VII of the CAAA expands the civil and criminal penalties available for violations of the Act.¹⁸³ Criminal penalties are provided for "knowing" violations of the Act and for any "knowing" or "negligent" release of a hazardous air pollutant. Criminal penalties are also imposed for making false statements, failing to report, and tampering with monitoring devices. Failure to knowingly pay any fee imposed by the Act is also a crime.¹⁸⁴ The civil penalty provisions detail when the Administrator can assess penalties and the criteria that must be employed.¹⁸⁵ In keeping with the "America's Most Wanted" environment, the Act authorizes EPA to pay a bounty of up to \$10,000 for information leading to a criminal conviction or civil penalty.¹⁸⁶

Of primary interest to environmental research groups like CERT, the Act specifically provides:

[T]he court in any action under this subsection [citizen suits] . . . shall have the discretion to order that such civil penalties, in lieu of being deposited in the [United States Treasury] . . . , be used in beneficial mitigation projects which are consistent with this Act and enhance the public health or the environment. The court shall obtain the view of the Administrator in exercising such discretion and selecting any such projects. The amount of any such payment in any such

¹⁸⁰E.g., CAAA § 604, 104 Stat. at 2655; § 605, 104 Stat. at 2658.

¹⁸¹CAAA § 611, 104 Stat. at 2665.

¹⁸²CAAA § 608, 104 Stat. at 2661; § 609, 104 Stat. at 2662.

¹⁸³CAAA Title VII--Provisions Relating to Enforcement, 104 Stat. at 2672-2685.

¹⁸⁴CAAA § 701, 104 Stat. at 2675-76 (amending CAA § 113(c)).

¹⁸⁵CAAA § 701, 104 Stat. at 2672-80 (amending CAA § 113).

¹⁸⁶CAAA § 701, 104 Stat. at 2679 (adding § 113(f)).

action shall not exceed \$100,000.¹⁸⁷

Although CERT would not be involved in any sort of citizen suit, it could be a group, designated by the affected industry, to receive money to conduct mitigation projects which may ultimately benefit the paying industry as well as the public health and environment.

Having the money paid to groups like CERT, to conduct research that will assist the industry in remedying a pollution problem, promotes Congress' goal of using some of the penalty funds to deal with specific problems. Industry litigants should be alert to opportunities to consult with CERT about mitigation programs it can design and present to the district court judge administering the citizen suit.

Title VIII of the Act contains two provisions directly impacting the oil and gas industry. The first, CAAA § 801, amends the Clean Air Act to add a new § 328 which requires the EPA to adopt regulations by November 15, 1991 to control air pollution from Outer Continental Shelf sources.¹⁸⁸ Offshore sources located within 25 miles of the seaward boundary of a state must apply the same requirements as though the source were an onshore source.¹⁸⁹ The Act also provides for case-by-case exemptions which can be granted when the Administrator finds "compliance with a pollution control technology requirement is technically infeasible or will cause an unreasonable threat to health and safety."¹⁹⁰

CAAA § 819 contains a broad exemption for stripper wells.¹⁹¹ Generally, this provision exempts stripper well operations from compliance with the nonattainment provisions of the Act. However, if the well is located in certain areas designated "Serious," "Severe," or "Extreme" for nonattainment, the exemption will not apply. The exemption applies to "the production of and equipment used in the exploration, production, development, storage or processing of" oil from a "stripper well property" and natural gas from a "stripper well." Although the exemption does not apply to hazardous air pollutants, § 301 of the CAAA will exempt oil and gas wells from certain hazardous air pollutant provisions.¹⁹²

¹⁸⁷CAAA § 707(b), 104 Stat. at 2683-83.

¹⁸⁸CAAA § 801, 104 Stat. at 2685.

¹⁸⁹Id.

¹⁹⁰Id.

¹⁹¹CAAA § 819, 104 Stat. at 2698-99.

¹⁹²CAAA § 301, 104 Stat. at 2559-60 (adding § 112(n)(4)).

III. ADMINISTRATIVE AND JUDICIAL DEVELOPMENTS

A. Resource Conservation and Recovery Act ("RCRA")

1. Defining "Hazardous Waste"

To ascertain whether an activity is subject to RCRA hazardous waste controls, the material must be evaluated to determine whether it is a "solid waste" and, if so, whether the solid waste is a "hazardous waste." A solid waste need not have the physical characteristics of a "solid." It can be a liquid or a containerized gas substance. RCRA defines "solid waste" as:

[A]ny garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of title 33 [Clean Water Act], or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended¹⁹³

The operative language used by the EPA to define a solid waste is the phrase "any discarded material."¹⁹⁴

¹⁹³42 U.S.C. § 6903(27) (1989).

¹⁹⁴40 C.F.R. § 261.2 (a)(1) (1990) (subject to certain materials that are specifically excluded from the definition). The EPA defines a "discarded material" as any material which is "abandoned," "recycled," or considered to be "inherently wastelike." 40 C.F.R. § 261.2 (a)(2) (1990). "Abandoned" is defined to include materials that are:

Disposed of; or
Burned or incinerated; or
Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

RCRA, and the EPA's regulations, specifically except certain activities and materials from the definition of a "solid waste." Therefore, the first step in evaluating an activity or material should be to determine if there is a specific exception that would exclude the activity or material from RCRA regulation. Even though the activity or material is exempt from RCRA regulation, it may be subject to regulation under state law or other federal laws, such as the Federal Water Pollution Control Act or the Clean Air Act. RCRA provides that the term "solid waste" does not include:

[S]olid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of Title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended. . . .¹⁹⁵

The EPA, through its regulations, has adopted specific "exclusions" to the definition of a "solid waste." Although the regulations incorporate the items excluded by RCRA, the regulatory list

40 C.F.R. § 261.2 (b) (1990).

RCRA defines the term "disposal" to include:

[T]he discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

42 U.S.C. § 6903 (3) (1989). Note that this definition includes passive releases of a solid or hazardous waste. It would appear that any release of a substance into the environment would constitute "disposal" of the material and therefore the material would be a solid waste.

The EPA has identified certain types of material which is deemed discarded even though the wastes are being "recycled." See 40 C.F.R. § 261.2 (c) (1990) (certain recycled material "used in a manner constituting disposal"); 40 C.F.R. § 261.2 (d) (1990) ("inherently waste-like material"). The EPA's underlying goal is to define the word "waste" broadly enough to prevent persons from avoiding regulation by saying the material is a valuable product or something other than a throwaway item.

¹⁹⁵42 U.S.C. § 6903(27) (1989).

includes items not referenced in the statute.¹⁹⁶

¹⁹⁶EPA's regulatory exclusions are found at 40 C.F.R. § 261.4 (1990), which provides:

(a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this part:

(1)(i) Domestic sewage; and (ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. 'Domestic sewage' means untreated sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, as amended. [Comment: (by the EPA) This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.]

(3) Irrigation return flows.

(4) Source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(6) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in § 261.1(c) of this chapter.

(7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in § 261.1(c) of this chapter.

(8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely

After a material is found to be a "solid waste," the next task is to determine whether the waste is "hazardous." RCRA defines "hazardous waste" as:

[A] solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may--

(A) cause, or significantly contribute to an increase in mortality or an increase of serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.¹⁹⁷

Pursuant to Congress' directives in RCRA, EPA established criteria for listing a solid waste as a hazardous waste. The EPA will list a solid waste as a hazardous waste when it possesses any of the

connected with pipes or other comparable enclosed means of conveyance;

(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and

(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal."

The EPA also excludes other substances that are designed to be applied to the land. 40 C.F.R. § 261.2(c)(1)(ii) (1990) excepts "commercial chemical products listed in § 261.33 . . . if they are applied to the land and that is their ordinary manner of use." Similarly, the EPA excepts burning a material for energy recovery when the substance is one of the "commercial chemical products listed in § 261.33 . . . if they are themselves fuels." 40 C.F.R. § 261.2(c)(2)(ii) (1990). 40 C.F.R. § 261.2(e) (1990) contains an exception for recycled materials. The exception for recycled materials is quite involved and includes a number of exceptions to the exception.

¹⁹⁷42 U.S.C. § 6903(5) (1989).

following EPA-established "characteristics":

- (1) Ignitability - the waste, during routine handling, can cause a fire or exacerbate a fire once started.¹⁹⁸
- (2) Corrosivity - the waste can corrode metal or it is a liquid with a pH of 2 or less or 12.5 or greater.¹⁹⁹
- (3) Reactivity - the waste is unstable and tends to react violently when mixed with water, or can cause an explosion when mixed with other materials.²⁰⁰
- (4) Toxicity - the waste, applying specified test methods, produces an extract [simulating leaching of water through the waste under assumed disposal conditions] that contains contaminants at listed concentrations.²⁰¹

The hazardous waste characteristics are used by the EPA in determining whether it should "list" a solid waste as a hazardous waste.²⁰²

Even though the EPA has not listed a solid waste as being hazardous, a solid waste that possesses a hazardous waste characteristic must be dealt with as a hazardous waste. Therefore, the regulated community must determine if it is dealing with a material that is a solid waste and a listed hazardous waste. Even though the solid waste is not listed, it will be deemed hazardous if it exhibits any of the hazardous waste characteristics. The person who generates a solid waste is required to test the waste, using EPA-approved test procedures, to determine whether it exhibits any of the hazardous waste characteristics.²⁰³ The EPA describes the analytical process that should be followed to determine whether you are dealing with a hazardous waste subject to RCRA regulation:

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous

¹⁹⁸40 C.F.R. § 261.21 (1990).

¹⁹⁹40 C.F.R. § 261.22 (1990).

²⁰⁰40 C.F.R. § 261.23 (1990).

²⁰¹40 C.F.R. § 261.24 (1990) (Concentrations listed in "Table 1 to the regulation").

²⁰²40 C.F.R. § 261.11 (1990).

²⁰³40 C.F.R. § 262.11(c) (1990).

waste using the following method:

(a) He should first determine if the waste is excluded from regulation under 40 CFR 261.4.

(b) He must then determine if the waste is listed as a hazardous waste in Subpart D of 40 CFR Part 261.

(c) For purposes of compliance with 40 CFR part 268, or if the waste is not listed in subpart D of this part, the generator must then determine whether the waste is identified in subpart C of 40 CFR part 261 by either:

(1) Testing the waste according to the methods set forth in Subpart C of 40 CFR Part 261, or according to an equivalent method approved by the Administrator under 40 CFR 260.21; or

(2) Applying knowledge of the hazardous characteristic of the waste in light of the materials or the processes used.²⁰⁴

2. Toxicity Characteristics Rule

In 1990 EPA adopted a new rule for determining when something meets the "toxicity" characteristic for classifying solid wastes as hazardous wastes.²⁰⁵ Referred to as the "Toxicity Characteristics Rule" ("TC Rule"), it generally expands the scope of the toxicity characteristic. The TC Rule is designed to predict whether an unmanaged waste material, placed in a municipal landfill, will leach out defined toxic constituents at environmentally-significant levels and contaminate ground water.²⁰⁶ This prediction was previously made employing the "Extraction Procedure" or "EP-toxicity" test. Applying the EP-toxicity test methods, an extract of the waste is obtained and then tested to determine if it possesses any of 14 toxic contaminants identified in the National Interim Primary Drinking Water Standards. The contaminant levels specified in the Drinking Water Standards were also used. However, the Drinking Water Standards refer to

²⁰⁴See "Appendix I--Overview of Subtitle C Regulations" immediately following 40 C.F.R. § 260.41 (1990).

²⁰⁵Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Toxicity Characteristics Revisions ("TC Rule"), 55 Fed. Reg. 11798 (March 29, 1990).

²⁰⁶See generally TC Rule, 55 Fed. Reg. at 11800.

concentrations at the water source. To account for the dilution and attenuation of the toxic constituents as they travel from landfill to ground water, the Drinking Water Standard concentrations were multiplied by 100 to arrive at the EP-toxicity level. Therefore, if the drinking water concentration is 0.05 mg/L, to arrive at the EP-toxicity waste level you take $0.05 \times 100 = 5.00$ Mg/L.²⁰⁷ If the extract exceeds the designated concentration for a toxic constituent, the waste is classified as a hazardous waste and must be managed as such.

The TC Rule expands the EP-toxicity standards by:

(1) Adding 25 organic chemicals to the current list of 14 chemicals.

(2) Establishing regulatory levels for the organic chemicals using health-based concentration thresholds and a modeled dilution/attenuation factor.

(3) Replacing the EP leach test with the Toxicity Characteristics Leaching Procedure ("TCLP").

To determine whether a waste stream exceeds the new TC Rule levels, the generator must obtain a liquid extract from the waste using the TCLP method and then compare the chemical concentrations in the extract to the regulatory levels established by the EPA. The chemicals and regulatory levels are set out in Table II.2. on page 45.²⁰⁸ Generators must now go back and apply the TCLP on material that was deemed non-toxic applying the EP test; applying the TCLP test may result in a finding of toxicity which would not have been

²⁰⁷Id.

²⁰⁸TC Rule, 55 Fed. Reg. at 11804 (Table II.2.--Toxicity Characteristics Constituents and Regulatory Levels); 55 Fed. Reg. at 11810 (Table B-1.--List of Organic Constituents Included in the Expanded TC Rule).

TABLE B-1.—LIST OF ORGANIC CONSTITUENTS INCLUDED IN THE EXPANDED TC RULE

Benzene	Hexachloro-1,3-butadiene
Carbon tetrachloride	Hexachlorobenzene
Chlordane	Hexachloroethane
Chlorobenzene	Methyl ethyl ketone
Chloroform	Nitrobenzene
m-Cresol	Pentachlorophenol
o-Cresol	Pyridine
p-Cresol	Tetrachloroethylene
1,4-Dichlorobenzene	Trichloroethylene
1,2-Dichloroethane	2,4,5-Trichlorophenol
1,1-Dichloroethylene	2,4,6-Trichlorophenol
2,4-Dinitrotoluene	Vinyl chloride
Heptachlor (and its hydroxide).	

TABLE II.2.—TOXICITY CHARACTERISTIC CONSTITUENTS AND REGULATORY LEVELS

EPA HW No. ¹	Constituent (mg/L)	CAS No. ²	Chronic toxicity reference level (mg/L)	Regulatory level (mg/L)
D004	Arsenic	7440-38-2	0.05	5.0
D005	Barium	7440-39-3	1.0	100.0
D018	Benzene	71-43-2	0.005	0.5
D006	Cadmium	7440-43-9	0.01	1.0
D019	Carbon tetrachloride	56-23-5	0.005	0.5
D020	Chlordane	57-74-9	0.0003	0.03
D021	Chlorobenzene	108-90-7	1	100.0
D022	Chloroform	87-86-3	0.06	6.0
D007	Chromium	7440-47-3	0.05	5.0
D023	o-Cresol	95-48-7	2	* 200.0
D024	m-Cresol	108-39-4	2	* 200.0
D025	p-Cresol	106-44-5	2	* 200.0
D026	Cresol		2	* 200.0
D016	2,4-D	94-75-7	0.1	10.0
D027	1,4-Dichlorobenzene	106-46-7	0.075	7.5
D028	1,2-Dichloroethane	107-06-2	0.005	0.5
D029	1,1-Dichloroethylene	75-35-4	0.007	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.0005	* 0.13
D012	Endrin	72-20-8	0.0002	0.02
D031	Heptachlor (and its hydroxide)	76-44-8	0.00008	0.008
D032	Hexachlorobenzene	118-74-1	0.0002	* 0.13
D033	Hexachloro-1,3-butadiene	87-86-3	0.005	0.5
D034	Hexachloroethane	87-72-1	0.03	3.0
D008	Lead	7439-92-1	0.05	5.0
D013	Lindane	58-89-9	0.004	0.4
D009	Mercury	7439-97-6	0.002	0.2
D014	Methoxychlor	72-43-5	0.1	10.0
D035	Methyl ethyl ketone	78-83-3	2	200.0
D036	Nitrobenzene	98-95-3	0.02	2.0
D037	Pentachlorophenol	87-86-5	1	100.0
D038	Pyridine	110-86-1	0.04	* 5.0
D010	Selenium	7782-49-2	0.01	1.0
D011	Silver	7440-22-4	0.05	5.0
D039	Tetrachloroethylene	127-18-4	0.007	0.7
D015	Toxaphene	8001-35-2	0.005	0.5
D040	Trichloroethylene	79-01-6	0.005	0.5
D041	2,4,5-Trichlorophenol	95-95-4	4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	0.02	2.0
D017	2,4,5-TP (Silvex)	93-72-1	0.01	1.0
D043	Vinyl chloride	75-01-4	0.002	0.2

¹ Hazardous waste number.

² Chemical abstracts service number.

³ Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

⁴ If o-, m-, and p-cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level for total cresol is 200 mg/L.

the case under the EP test.²⁰⁹ Also, as noted by the EPA in discussing its TC Rule: "Wastes identified as hazardous under the Toxicity Characteristic will also become hazardous substances under section 101(14) of . . . [CERCLA]."²¹⁰

3. Statutory and Regulatory Exceptions to "Hazardous" Waste Classification

As with the definition of "solid" waste, RCRA creates certain statutory exceptions to the definition of "hazardous" waste. RCRA also permits the EPA to create regulatory exceptions under certain circumstances. The RCRA statutory exception for oil and gas wastes provides, in part:

[D]rilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of this subchapter [until EPA completes a study on whether such wastes should be regulated as hazardous wastes].²¹¹

As directed by RCRA²¹², EPA completed its study of oil and gas wastes and delivered to Congress in December of 1987 its report titled: "Management of Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy." In July, 1988 EPA issued its decision to exempt many, but not all, exploration and production wastes from RCRA's hazardous waste provisions.²¹³

Most of the exceptions to the definition of hazardous waste are the product of administrative decisions reflected in EPA regulations. 40 C.F.R. § 261.3 defines a hazardous waste stating:

²⁰⁹The TC Rule took effect on September 25, 1990 as to persons generating 1,000 kg/month or more of hazardous waste. The TC Rule takes effect on March 29, 1991 for "small quantity generators"--persons generating more than 100 kg/month but less than 1,000 kg/month. TC Rule, 55 Fed. Reg. at 11798.

²¹⁰TC Rule, 55 Fed. Reg. at 11804.

²¹¹42 U.S.C. § 6921(b)(2)(A) (1989).

²¹²42 U.S.C. §§ 6921(b)(2)(A) and 6982(m) (1989).

²¹³53 Fed. Reg. 25446 (July 6, 1988) (exempt wastes will be regulated under Subtitle D of RCRA instead of Subtitle C).

A solid waste . . . is a hazardous waste if: (1) If it is not excluded from regulation as a hazardous waste under § 261.4(b)²¹⁴

Therefore, we must initially look to 40 C.F.R. § 261.4(b) to see what the EPA has excluded from the definition of hazardous waste.²¹⁵

²¹⁴40 C.F.R. § 261.3 (1990).

²¹⁵40 C.F.R. § 261.4(b) states that the following solid wastes are not hazardous wastes:

- (1) "Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. 'Household waste' means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas)."
- (2) "Solid wastes generated by . . . [growing crops and raising animals] which are returned to the soils as fertilizers."
- (3) "Mining overburden returned to the mine site."
- (4) "Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy."
- (5) Certain wastes created by pollution control equipment associated with the burning of coal or other fossil fuels.
- (6) Certain trivalent chromium wastes as specifically defined in 40 C.F.R. § 261.4 (b)(6) (1990).
- (7) "Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore [as more fully defined and limited in 40 C.F.R. § 261.4 (b)(7) (1990)]."
- (8) "Cement kiln dust waste."

Even though a waste may be "hazardous," it may be exempt from certain hazardous waste regulations if it is "in a product or raw material" storage tank, transport vehicle, pipeline, "or in a manufacturing process unit."²¹⁶ However, the hazardous waste is only exempt until it exits the unit in which it was generated.²¹⁷

4. Judicial Application of the Definition

In Sierra Club v. United State Dept. of Energy,²¹⁸ the court addresses the effect of mixing a statutorily exempt waste, radioactive waste, with other hazardous wastes. The Department of Energy, at its Rocky Flats Plant, was collecting, storing, and ultimately incinerating "dry combustible waste, kimwipes, aqueous waste, laboratory waste oil, rags, trash, and spent solvents" contaminated with plutonium. The ash from the incinerator would be collected and treated to recover the plutonium residue.²¹⁹ The Sierra Club brought action under the citizen suit provision of RCRA asserting these materials were a hazardous waste subject to RCRA regulation.

The court holds that the hazardous wastes mixed with the plutonium are subject to RCRA regulation--even though the plutonium itself is not subject to RCRA.²²⁰ The court notes that EPA's

(9) Certain discarded wood and wood products as defined in 40 C.F.R. § 261.4(b)(9) (1990).

(10) Certain "petroleum contaminated media and debris" as defined in 40 C.F.R. § 261.4 (b)(10) (1990).

²¹⁶40 C.F.R. § 261.4(c) (1990).

²¹⁷The exemption does not apply to hazardous waste released into a "surface impoundment" and the hazardous waste cannot remain in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. 40 C.F.R. § 261.4(c) (1990).

²¹⁸734 F. Supp. 946 (D. Colo. 1990).

²¹⁹Sierra Club, 734 F. Supp. at 948.

²²⁰42 U.S.C. § 6903(27) (1989) exempts "source, special nuclear, or byproduct material as defined by the Atomic Energy Act" from the definition of "solid waste." Since plutonium is not a RCRA solid waste, it cannot become a RCRA hazardous waste.

definition of a hazardous waste is supplemented by regulations known as the "mixture rule" and the "derived from rule." Under EPA's mixture rule if a hazardous waste becomes mixed with a nonhazardous waste, the entire mixture can become a hazardous waste subject to RCRA.²²¹ Under the derived-from rule "any solid waste generated from the treatment . . . of a hazardous waste . . . is a hazardous waste."²²² Therefore, the court concludes:

²²¹The regulation governing the mixture problem is found at 40 C.F.R. § 261.3(2) (1990). EPA deals with a mixture of a characteristic hazardous waste and a solid waste differently than a mixture of a listed hazardous waste and a solid waste. The entire mixture of a listed hazardous waste and a solid waste is deemed hazardous unless:

(1) The hazardous waste was listed solely because it had a hazardous characteristic and the mixture does not exhibit the hazardous characteristic which caused the listing; [40 C.F.R. § 261.3(a)(2)(iii) (1990).] or

(2) The mixture is of certain limited concentrations of hazardous wastes added to a wastewater discharge regulated under § 402 or § 307(b) of the Clean Water Act, as more fully stated in 40 C.F.R. § 261.3(a)(2)(iv) (A)-(E) (1990).

A mixture of a characteristic hazardous waste and a solid waste is deemed hazardous only if the entire mixture exhibits the hazardous characteristic. There is also an exemption for certain mining wastes mixed with solid waste, which exhibits a hazardous characteristic only because of the presence of an exempted mining waste. See 40 C.F.R. § 261.3(a)(2)(i) (1990).

²²²40 C.F.R. § 261.3(c)(2)(i) (1990). Begin with the basic premise that:

[A]ny solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste.

40 C.F.R. § 261.3(c)(2)(i) (1990). Exceptions to the rule include:

[M]aterials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

40 C.F.R. § 263(c)(2)(i) (1990) (EPA comment). Certain wastes are excluded if they do not exhibit a hazardous waste characteristic:

[T]he dry combustible waste, kimwipes,²²³ aqueous waste, laboratory waste oil, rags, trash, and spent solvents, that formerly were burned in the . . . incinerator and now are stored pending resumption of plutonium recovery operations, as well as residues²²⁴ from the . . . incinerator, although mixed with plutonium, are hazardous waste.²²⁵

B. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

1. The Hazardous Substance Requirement: The "Petroleum Exclusion"

CERCLA only applies to substances that are defined as "hazardous."²²⁶ In addition, CERCLA specifically excludes from the definition of hazardous substance:

[P]etroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated

(1) "Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry." 40 C.F.R. § 261.3 (c)(2)(ii)(A) (1990).

(2) Wastes from burning certain recyclable materials. 40 C.F.R. § 261.3(c)(2)(ii)(B) (1990).

²²³The kimwipes became a hazardous waste when they were used to wipe up solvents that were listed hazardous wastes under RCRA. Under the mixture rule the kimwipes then became a hazardous waste. Once the kimwipes were placed with plutonium-contaminated material, the entire mixture became subject to RCRA.

²²⁴The waste material was being burned and then plutonium was recovered from the ash remaining after incineration.

²²⁵Sierra Club v. United States Dept. of Energy, 734 F. Supp. 946, 949 (D. Colo. 1990).

²²⁶The event which triggers the CERCLA system is a "release" or a "substantial threat of a release" into the "environment" of a "hazardous substance."

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 synthetic gas).²²⁷

This "petroleum exclusion" has been tested in cases concerning the cleanup of sites contaminated by leaking underground storage tanks. The most significant decision to date is Wilshire Westwood Associates v. Atlantic Richfield Corp.²²⁸ where the court held the petroleum exclusion applied to gasoline from leaking underground tanks--even though the gasoline contained the listed hazardous substances benzene, toluene, xylene, ethyl-benzene, and lead. The court, following an EPA opinion addressing the issue, held: "[T]he petroleum exclusion in CERCLA does apply 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."²²⁹

In Equitable Life Assurance Society of the U.S. v. Greyhound Corp.²³⁰ Equitable owned property which it had leased to Greyhound for a bus terminal from the 1950's until 1987. Greyhound used six underground storage tanks located on the property to store diesel fuel and other petroleum products. Equitable subsequently discovered that the property was contaminated with diesel fuel, apparently due to leaking underground tanks. Equitable sued Greyhound under CERCLA to recover its cleanup costs. The court dismisses Equitable's claim simply stating that diesel fuel is encompassed by the petroleum exclusion under CERCLA.²³¹

2. Defining the Liable Parties

CERCLA establishes six classes of parties which can be held liable for cleanup costs:

1. Present owners of the facility;
2. Present operators of the facility;
3. Past owners of the facility, if they owned it at the time

²²⁷CERCLA, 42 USC § 9601(14).

²²⁸881 F.2d 801 (9th Cir. 1989).

²²⁹Wilshire Westwood Associates v. Atlantic Richfield Corp., 881 F.2d 801, 805 (9th Cir. 1989).

²³⁰31 ERC 1079 (E.D. Penn. 1990).

²³¹31 ERC at 1080.

a hazardous waste was disposed at the facility;

4. Past operators of the facility, if they were operating it at the time a hazardous waste was disposed at the facility;

5. Persons who, at any time, "arranged for" hazardous substances to be disposed or treated at, or transported to, the facility;

6. Persons who transport hazardous substances and selected the facility for their disposal.²³²

The EPA, and PRPs in private cost-recovery and contribution actions, often try to expand the definition of liable parties to include other parties that may have the financial ability to cover cleanup costs.

For example, in U.S. v. Consolidated Rail Corp.²³³ the EPA commenced a CERCLA action against various PRPs to clean up a site where coal tar was treated and prepared for sale. Seven of the PRPs filed a third-party complaint for indemnity and contribution against Burke and Eklof, asserting they were liable parties under CERCLA. Consolidated Rail Corporation ("Conrail") owned the site and leased it to the site operator, Sea-Port Services, Ltd. The coal tar was sent to the site by various generators, including Philadelphia Electric Company ("PECO"), which had sold its coal tar to Sea-Port. Burke used coal tar in its wood treatment operations. Burke agreed to purchase coal tar products supplied by Sea-Port. To ensure that the products met Burke's water content specifications, Burke visited Sea-Port's plant ten to twelve times and offered technical advice on how to refit the plant to treat coal tar. Burke also provided Sea-Port with a toluene extraction unit which could be used to determine water content. Burke also gave Sea-Port the names of suppliers for coal tar and other raw material.

Various PRPs shipped coal tar by vacuum truck to the Sea-Port site where it was heated and processed to remove excess water. Once the water was removed, the material was shipped to Burke who paid Sea-Port for its services. Burke received the coal tar at less than one-half the market price.²³⁴ The PRPs, in their third-party complaint, assert Burke, by its actions, became an owner or operator of a hazardous waste facility--the Sea-Port site, or a generator who arranged for disposal of hazardous wastes at the Sea-

²³²CERCLA, § 107(a), 42 U.S.C. § 9607(a)(1) - (4) (1989).

²³³31 ERC 1060 (D. Del. 1990).

²³⁴31 ERC at 1064.

Port site.²³⁵ Burke gave its approval to the types of raw coal tar shipped to the plant and purchased all of the plant's output of treated coal tar. The PRPs also assert that Burke and Sea-Port were joint venturers since Burke provided technical assistance, equipment, and received coal tar from the plant at one-half its market value.

The court holds that Burke and Sea-Port were not joint venturers. Although Burke may have been receiving some of the profits from the enterprise through reduced coal tar costs, it did not agree to share in losses, nor did it have an ownership interest in the venture. The court also holds that Burke's involvement in the Sea-Port operation was not sufficient to make it an operator under CERCLA. The court states: "pre-approval of raw coal tar shipments into the Sealand [Sea-Port] facility and buying its output does not constitute operating or exercising control at the Sealand [Sea-Port] facility."²³⁶

The PRPs also argue that Burke's agreement with Sea-Port was an arrangement for the disposal or treatment of hazardous substances at the Sea-Port site. The court holds that the evidence does not indicate that Burke controlled, or had the authority to control, the hazardous substances brought to the Sea-Port site. The court also distinguishes Burke from the situation involved in U.S. v. Aceto Agricultural Chemicals Corp.²³⁷ where various chemical companies were held liable for cleanup of a site where Aidex formulated technical grade pesticides into commercial grade pesticides. In Aceto the companies owned the pesticide before, during, and after the formulating process. Aidex was essentially acting as an independent contractor for the pesticide owners. The court notes that Burke did not own the coal tar going into the process and although Burke purchased all the coal tar Sea-Port processed, it was only obligated to purchase the product on a month to month basis for one year. The court therefore holds that Aceto is distinguishable from Burke's situation.²³⁸

The PRPs also argued that Eklof, a barge operator, is liable as a generator under CERCLA. Eklof operated a barge which took on coal tar owned by M.R. Trading, a waste oil broker, for delivery to a purchaser, Diamond Petroleum. Diamond rejected the coal tar because it contained too much water. M.R. Trading instructed Eklof to hold the oil aboard ship until another purchaser was found.

²³⁵31 ERC at 1066.

²³⁶31 ERC at 1067.

²³⁷699 F.Supp. 1384 (S.D. Iowa 1988), aff'd in part, rev'd in part, 872 F.2d 1373 (8th Cir. 1989).

²³⁸31 ERC at 1068-69.

Sea-Port purchased the coal tar which was delivered to the Sea-Port site. The PRPs assert that Eklof was the owner of the coal tar so it is liable as a generator that arranged for the disposal of the coal tar at the Sea-Port site.

Although Eklof's signature appeared on the purchase order as the "seller" of the coal tar, the evidence indicated that Eklof was listed to show that Eklof considered the debt owed it by M.R. Trading was to be satisfied by the agreement of Sea-Port to pay Eklof \$.04 per gallon out of the \$.06 per gallon purchase price. The court finds that the only evidence on the issue indicates that Eklof had no ownership interest in the coal tar; nor did it participate in the negotiations to sell the coal tar. The court holds Eklof was not a generator because it took no affirmative action to dispose of the waste at the Sea-Port site.²³⁹

3. Successor Liability

Generally, if you purchase a property from another person, you can incur CERCLA liability for the seller's hazardous waste activities only when the purchased property is the site requiring cleanup. Merely owning the asset should not give rise to liability for the disposal practices of the seller--when the disposal took place at sites other than the purchased property. However, if the transaction is deemed to be something more than a mere purchase of the seller's assets, there is the possibility that the purchaser may be responsible for seller's CERCLA liability as an owner or operator of other assets and as a generator. For example, if company A acquires company B by merger, the surviving company will step into the shoes of company B and assume company B's liabilities, including CERCLA liabilities.²⁴⁰

The difficult issues arise when the purchasing company continues some of the business of the selling company, but the transaction does not amount to a merger. For example, in U.S. v. Distler,²⁴¹ the Angell Company, in 1976, contracted to have

²³⁹31 ERC at 1070.

²⁴⁰The basic rule under corporate law is that a purchase of a corporation's assets does not transfer the selling corporation's liabilities to the purchaser, unless one of the following four situations exist: (1) the purchaser expressly agrees to assume the selling corporation's liabilities; (2) the transaction amounts to a consolidation or merger; (3) the purchasing corporation is a "mere continuation" of the selling corporation; or (4) the transaction is fraudulent or lacking in good faith. See generally U.S. v. Distler, 31 ERC 1092, 1094 (W.D. Ky. 1990).

²⁴¹31 ERC 1092 (W.D. Ky. 1990).

hazardous wastes disposed at a site which is now the subject of a CERCLA cleanup. In 1979, three employees of the Angell Company ("Angell I") formed what would become the Angell Corporation ("Angell II") once they completed the purchase of Angell I. Angell II acquired substantially all the assets of Angell I, Angell I was then dissolved and its assets distributed to its shareholders. None of the shareholders of Angell II owned an interest in Angell I; the Angell II shareholders were employees of Angell I and most of the employees of Angell I were hired by Angell II. Angell II continued to produce the same products and serve the same customers; Angell II held itself out to the public as the same company as Angell I.²⁴²

Under these circumstances, the EPA argues that Angell II should be held liable for the CERCLA obligations of Angell I. The interpretive issue is whether the term "person," which is defined by CERCLA to include "corporations,"²⁴³ includes a successor to a corporation. Although Angell I is the "corporation" that "arranged for the disposal . . . of hazardous substances" giving rise to liability, does the term include Angell II that merely purchased Angell I's assets and continued the business? Angell II argues that it should not be held responsible because it was not the "corporation" that disposed of the waste. Angell I is the "corporation" and if Congress intended to include successors to a corporation, it would have expressly provided for such liability in CERCLA.

The court rejects this reasoning noting that the goals of CERCLA would be frustrated by a narrow interpretation of the word "corporation" and promoted by a broad interpretation. The court identifies the underlying goal which guides its interpretation as: "making responsible parties instead of taxpayers pay for hazardous waste clean-up."²⁴⁴ Therefore, the court holds that it will

²⁴²31 ERC at 1093.

²⁴³CERCLA § 101.

²⁴⁴31 ERC 1094. This concept, in the context of the successor corporation, is further defined by a quote the court highlights from Smith Land and Improvement Corp. v. Celotex Corp., 851 F.2d 86 (3d Cir. 1988), cert. denied, 109 S.Ct. 837 (1989):

Congressional intent supports the conclusion that, when choosing between the taxpayers or a successor corporation, the successor should bear the cost. Benefits from use of the pollutant as well as savings resulting from the failure to use non-hazardous disposal methods inured to the original corporation, its successors, and their respective stockholders and accrued only indirectly, if at all, to the general public.

recognize exceptions to the general rule that a purchase of corporate assets does not give rise to an implied assumption of the selling corporation's liabilities. The next issue becomes whether the court will define liability under state successor liability law or will it fashion a federal common law to govern these issues under CERCLA. The court holds a federal common law of CERCLA successor liability should be developed which can be fashioned to promote the goals of CERCLA.²⁴⁵

The court notes that if it applied the "traditional" successor liability rules, Angell II would not be responsible for the disposal liabilities of Angell I.²⁴⁶ The court rejects limitations under the traditional successor liability doctrine and fashions a rule which it finds to be consistent with the goals of CERCLA. The court notes:

Just as the traditional doctrine's application in the area of products liability has lead some courts to loosen the doctrine's requirements to harmonize it with the theory of strict products liability, this court believes that strict adherence to the parochial requirements in CERCLA cases may in some instances conflict with the remedial policies underlying the statute Although a majority of jurisdictions may presently adhere to such constructions of the doctrine, where to do so would conflict with Congressional intent, the court is bound to seek an application which avoids such conflict.²⁴⁷

The court holds that Angell II is liable for Angell I's hazardous waste disposal practices, applying "the substantial continuity exception" to the general rule of no successor liability. The substantial continuity exception has been applied by the United States Supreme Court in labor disputes to determine the liability of successor corporations.²⁴⁸ To determine whether

851 F.2d at 91-92.

²⁴⁵31 ERC at 1095.

²⁴⁶The court notes that no stock was transferred from Angell I to Angell II; no officers of Angell I became officers of Angell II. Since there is no identity of stockholders or directors between the companies, Angell II would not be a successor of Angell I--under the traditional analysis. 31 ERC at 1095.

²⁴⁷31 ERC at 1095.

²⁴⁸See Fall River Dyeing & Finishing Corp. v. N.L.R.B., 107 S.Ct. 2225 (1987).

the exception to non-liability will apply, the court looks at whether the successor:

- (1) retains the same employees;
- (2) retains the same supervisory personnel;
- (3) retains the same production facilities in the same location;
- (4) continues producing the same products;
- (5) retains the same name;
- (6) maintains continuity of assets and general business operations; and
- (7) holds itself out to the public as the continuation of the previous corporation.²⁴⁹

Applying these factors, the court concludes:

The company retained essentially the same employees and management. The company operated out of the same physical facilities and produced the same product line after the transfer as before. The company held itself out to the public as the same company, retained the same operating assets and succeeded to all liabilities necessary for the orderly transition of ownership and to prevent the interruption of the daily business operation. To permit Angell [II] to avoid liability in this case would clearly be a victory of form over substance and contrary to congressional intent that producers of hazardous substances be held liable for improper disposal of those substances under CERCLA.²⁵⁰

4. Shareholder Liability

In U.S. v. Distler²⁵¹ the government sought to impose CERCLA liability on the shareholders of Angell I as well as the successor company, Angell II. Shortly after the sale of the Angell I assets to Angell II in 1979, Angell I was dissolved and the purchase price was distributed to its shareholders. The court notes that like the successor liability rule, the rule governing shareholder liability should be determined by federal law; otherwise liability under CERCLA may vary depending upon the state of incorporation.²⁵² The court finds it doesn't have to tackle the details of this issue

²⁴⁹31 ERC at 1096.

²⁵⁰31 ERC at 1096.

²⁵¹U.S. v. Distler, 31 ERC 1097 (W.D. Ky. 1990).

²⁵²31 ERC at 1099.

because the government offered "no authority . . . which would permit the imposition of liability upon Angex [Angell I] or Mr. Davis [a shareholder in Angell I]." ²⁵³ Granting the Angex/Davis motion to dismiss, the court states: "there is no precedent for imposing liability on a dissolved corporation nine years after it has wound down and distributed its assets." ²⁵⁴

5. Settlement Strategy

In U.S. v. Cannons Engineering Corp. ²⁵⁵ the court demonstrates the risks and rewards of settling CERCLA claims with the EPA. The EPA notified 671 PRPs of their potential liability for the cleanup of specified hazardous waste sites. The EPA decided to divide the PRPs into two classes. The first class included what the EPA defined as de minimis contributors to the site: any hazardous waste generator that contributed less than 1%, by volume, of the total waste sent to the sites. The second class included owners, operators, transporters, and generators who contributed 1% or more of the total waste sent to the sites.

The EPA initially offered the de minimis contributors "administrative settlements" for those willing to pay 160% of its volumetric share of the total projected response cost. This would relieve the settling party from any present and future liability associated with the sites. The additional 60% over the projected costs was included to account for unexpected costs and unanticipated events. When EPA proposed the settlement, it informed the parties as follows:

The government is anxious to achieve a high degree of participation in this de minimis settlement. Accordingly, the terms contained in this settlement offer are the most favorable terms that the government intends to make available to parties eligible for de minimis settlement in this case. ²⁵⁶

300 PRPs entered into de minimis administrative settlements with EPA. ²⁵⁷

²⁵³31 ERC at 1099.

²⁵⁴31 ERC at 1099.

²⁵⁵31 ERC 1049 (1st Cir. 1990).

²⁵⁶31 ERC at 1053.

²⁵⁷31 ERC at 1050.

The EPA then brought suit against 84 of the PRPs who either rejected or were ineligible for the de minimis administrative settlement. The EPA subsequently entered into consent decrees with 47 major PRP contributors and 12 de minimis contributors. Seven non-settling PRPs objected to the proposed consent decrees. The district court certified the decrees as final and the seven non-settling PRPs appealed. On appeal the non-settling PRPs assert that EPA's approach to settlement lacked procedural and substantive fairness, was unreasonable, and violated the statutory requirements of CERCLA. The court rejects their claims and upholds the consent decrees.

Among the many arguments addressed by the court, the following holdings highlight the EPA's considerable discretion in offering and administering CERCLA settlements:

1. The EPA can structure classes of PRPs for settlement purposes. The 1% volumetric criteria for separating minor from major contributors was, under the circumstances, acceptable.

2. The EPA could impose a premium on PRPs who refused to accept the administrative settlement but desire to settle after suit is filed. The consent decree provided that the 12 de minimis contributors would pay 260% of their respective volumetric shares of the total projected response cost. If the same parties had joined in the administrative settlement, they would have only been required to pay 160%. The court holds that the additional 100% is consistent with CERCLA's goal of obtaining prompt voluntary cleanup.²⁵⁸

3. Although settlement with some PRPs may result in disproportionate liability for the non-settlers, this is expressly permitted by the SARA Amendments to CERCLA. The statute protects the settling parties from liability for contribution. It also provides that only the dollar amount of the settlement, not the

²⁵⁸The court notes:

That the cost of purchasing peace may rise for a laglast is consistent with the method of the statute; indeed, if the government cannot offer such routine incentives, there will be little inducement on the part of any PRP to enter an administrative settlement. Of course, the extent of the differential must be reasonable and the graduation neither unconscionable nor unduly coercive We believe that the EPA is entitled to make use of a series of escalating settlement proposals in a CERCLA case and that . . . the serial settlements employed in this instance were substantively fair.

settling party's proportionate share of liability, can be subtracted from the liability of the non-settlers.²⁵⁹

4. The court will not permit a common law claim for indemnity from settling parties. The court characterizes the non-settlers' claim for indemnity as merely a "more extreme form of a claim for contribution" which is prohibited by CERCLA.

5. The EPA does not need to disclose what its future negotiating or settlement strategy will be, nor must it open all settlement offers to all PRPs. In this case, when EPA proposed its consent decree settlements, it elected not to permit de minimis settlers to join in a major party settlement. The court notes:

Under the SARA Amendments, the right to draw fine lines, and to structure the order and pace of settlement negotiations to suit, is an agency prerogative. . . . So long as it operates in good faith, the EPA is at liberty to negotiate and settle with whomever it chooses.²⁶⁰

6. The EPA could disqualify a party from de minimis settlement treatment when the party failed to comply with EPA's information requests concerning the amount and nature of the waste the party had sent to the sites.

IV. TORT LAW DEVELOPMENTS

Litigants continue to turn to state tort law to supplement remedies provided by state and federal environmental laws. In light of the RCRA exemption for oil and gas wastes, and the CERCLA petroleum exclusion, it is not surprising that litigants are relying upon tort law to deal with oil and gas pollution issues.

²⁵⁹CERCLA provides:

A person who has resolved its liability to the United States or a State in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement. Such settlement does not discharge any of the other potentially liable persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement.

42 U.S.C. § 9613(f)(2) (1987).

²⁶⁰31 ERC at 1059.

A recent case out of Oklahoma demonstrates the potential for tort law in the exploration and production context.

In Marshall v. El Paso Natural Gas Co.²⁶¹ Meridian held the leasehold rights to oil and gas in land owned by Marshall. Meridian entered Marshall's land and drilled a well; Meridian failed to comply with various pit and pond regulations and improperly plugged the well. When the well was plugged, an Oklahoma Corporation Commission field inspector was at the site and "approved the plugging as proper."²⁶² Marshall sued Meridian asserting damages arising out of Meridian's negligent plugging of the well. The jury agreed with Marshall and awarded \$350,050 for diminution in value of the property, \$50,000 for nuisance damages, and \$5,000,000 in punitive damages.²⁶³

In Marshall the court affirms the jury's award and the trial court's refusal to refer the matter to the Oklahoma Corporation Commission under the primary jurisdiction doctrine. The court of appeals recites what it believes are the clear and convincing acts of the defendants that support the jury's award of punitive damages:

Meridian's drilling of the Marshall well without a water string to protect the fresh water aquifer even though Meridian attended a Commission meeting discussing the general problem of fresh water pollution and the need to set and cement surface casing fifty to 200 feet below the base of the fresh water; Meridian's failure to jet bentonite into the west pit in a manner to create an impervious seal; Meridian's use of the east pit with an inadequate plastic liner for five months after a Commission rule was issued specifying the liner as inadequate; and Meridian's failure to plug the Red Fork and Atoka formations separately in violation of Commission rules.²⁶⁴

The Marshall case should serve as a reminder to developers that even though their conduct may pass muster with a regulatory agency, to avoid liability the developer must also consider the non-regulatory risks associated with its actions. An understanding and forgiving regulator is not necessarily the industry's best friend. In this case the landowner initially asked the Corporation

²⁶¹874 F.2d 1373 (10th Cir. 1989).

²⁶²Marshall v. El Paso Natural Gas Co., 874 F.2d 1373, 1381 (10th Cir. 1989).

²⁶³Marshall, 874 F.2d at 1376.

²⁶⁴Id. at 1384.

Commission to take action against Meridian to rectify the situation. The Commission dismissed the landowner's complaint without any action. The landowner found a receptive audience in the jury. It appears Meridian, in addition to the \$5,400,050 it must pay Marshall, will also be required to remedy any problems it has created at the Marshall site.