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Using ADR Principles to Resolve Environmental Disputes: How Mediated Settlements Have Helped Struggling CERCLA Survive

Jamie R. Adams

I. INTRODUCTION

Chemical fires, foul smells, and depleted wildlife are only a few of the problems found at thousands of contaminated sites, not to mention communities, within the United States. Contaminants such as asbestos, arsenic, lead, mercury, chlorinated solvents, and nuclear material are present at more than 1,300 hazardous waste sites, contaminating the air, soil, and groundwater, and posing serious risks to human health. The Environmental Protection Agency ("EPA") has reported that "[e]ven today [one] in [four] Americans live within [three] miles of a Superfund site." The


2. Environmental Protection Agency, Superfund's 25th Anniversary: Capturing the Past, Charting the Future (July 17, 2007), http://www.epa.gov/superfund/25anniversary/,(Hazardous waste sites pose a significant human health risk.)

Studies conducted by the Agency for Toxic Substances and Disease Registry (ATSDR) demonstrate that a variety of health problems are associated with these toxic sites, including but not limited to: birth defects, reduction in birth weight, lung and respiratory diseases, changes in neurobehavioral function, infertility, and several kinds of cancer.

Comprehensive Environmental Clean-up and Liability Act ("CERCLA" or "Superfund")\(^3\) was enacted to combat this very problem, but in recent years the program has struggled due to under-funding.\(^4\) The Superfund Trust Fund was created in 1980 but stopped receiving funds in 1995 after the expiration of the "polluter pays" taxes that were sustaining it.\(^5\) The trust fund continued to pay for the cleanup of hazardous sites until it finally went bankrupt in 2004.\(^6\) The failure to reinstate CERCLA's tax authority has left the EPA searching for new ways to finance the clean up of hazardous waste sites and continue protecting human health and the environment.\(^7\)

The goal of this article is to show that the use of Alternative Dispute Resolution ("ADR") principles has made the remediation of numerous hazardous waste sites possible, and has thus enabled the struggling program to continue benefiting Americans everywhere. First, this article provides background information regarding the enactment of CERCLA and its successor, the Superfund Amendments Reauthorization Act ("SARA"). Second, it explains why using ADR principles, instead of litigation, are vital methods of resolving CERCLA disputes. Third, three examples of major Superfund sites that were successfully cleaned up due to the use of mediated settlements and other ADR principles are discussed. Finally, this article discusses the specific ways in which mediated settlements are helping to fund remediation and reduce costs to the parties involved.

II. BACKGROUND

A. The Love Canal Problem and the Rise of CERCLA Legislation

In the 1970s, Congress attempted to protect the environment by enacting a pollution control scheme which included the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act.\(^8\) However,

\(^5\) See Natural Resources Defense Council, supra note 5 at 2-3.
\(^6\) See Cartwright, supra note 2, at 300-01.

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when several residents of Niagara Falls, New York reported foul smells and residues in homes throughout their community, ultimately uncovering the presence of a highly toxic industrial landfill. Congress quickly realized these Acts were incapable of responding effectively to past or continuing harms.

Investigations at the Niagara Falls landfill showed that Hooker Chemical Company had disposed of 21,000 tons of chemical waste between 1942 and 1952. The landfill had been covered over and given to the city, which subsequently developed the surrounding area to include a school and over 200 residences. Further studies showed that numerous toxic chemicals were migrating from the landfill and contaminating nearby waterways over a seventy-acre area, now known as the Love Canal site. The community was “virtually contaminated,” and “its water, air, and soil [were] replete with toxic waste.” In 1978, President Jimmy Carter first declared the area an environmental emergency and then again in 1980. Approximately 950 families were evacuated from a ten-block area that surrounded the canal, sparking national attention.

At this time, little was known about the existence of “other unregulated hazardous waste sites,” but authorities quickly discovered that the Love Canal was “not an isolated incident,” but “was typical of a ‘pervasive national problem.’” The EPA initially estimated that there were

9. When heavy rains seeped into the soil where leaking metal drums had been buried, residents began to notice “a stench and oozing slime.” Leonard O. Townsend, Note, Love Lies Bleeding: Brownfields in the New Millennium, 11 FORDHAM ENVTL. L. REV. 873, 875 (2000). Toxic waste from the drums had leaked, and entered the basements of residences in the area, causing a “high rate of birth defects and cancer.” Id. Children in the area were born with birth defects, and adults in the area reported liver problems and nervous disorders. Id.


11. Niermann, supra note 8, at 393.


13. Plater, supra note 10, at 525.


17. Cartwright, supra note 2, at 303 (quoting ENVIRONMENTAL PROTECTION AGENCY, OIL & SPECIAL MATERIALS CONTROL DIV., EPA NO. 430/9/80-004, DAMAGES AND THREATS CAUSED BY
approximately 30,000 to 50,000 unregulated hazardous waste sites, and that
approximately 1,200 to 2,000 of these sites posed a "serious risk to public
health." 18 By 1980, Congress had discovered that a wide variety of
individuals and companies had dumped toxic chemicals at multiple
hazardous waste sites for an extended period of time and that contributors
had often disappeared or become insolvent. 19 After realizing the
shortcomings of the current environmental regulatory scheme, Congress
hastily enacted the CERCLA legislation. 20

B. Overview of CERCLA Purpose and Structure

Unlike other environmental statutes, the CERCLA legislation does not
state its goals. 21 However, the Senate Report states, "[T]he primary goal of
CERCLA is to create a 'Superfund' to allow for the immediate clean up and
restoration of contaminated sites." 22 CERCLA creates federal authority to
remediate releases of hazardous substances, imposes liability for remediation
costs on potentially responsible parties ("PRPs"), and requires the parties to

HAZARDOUS MATERIAL SITES xi (1980)). See also Cong. Q., Inc., Congress Clears 'Superfund'
Legislation, in 36 CONG. Q. ALMANAC 584, 585-86 (1980).
Lynda J. Oswald, Strict Liability of Individuals Under CERCLA: A Normative Analysis, 20 ENVTL.
AFF. 579, 585 (1993)). Several cases involving hazardous waste sites were filed in the 1980s,
20. Cartwright, supra note 2, at 303 n.20 (explaining that CERCLA's legislative history
demonstrates the "short and hurried deliberations of the 96th Congress in passing CERCLA.").
However, there is some disagreement over whether CERCLA was enacted due to the discovery of
the Love Canal, or was already under consideration by Congress at the time. Compare Plater, supra
note 10, at 525-26 stating,

[Lake Canal residents] managed to instigate national coverage for the story, and
eventually even the White House was forced to take note... the entire chemical industry
was tarred with the revelation that disposal practices over decades of years had been
reckless and sloppy, with an 'out of sight, out of mind' approach. Regardless of what the
technical details of the arguments might have been, Love Canal became a media magnet,
drawing congressional attention and prompting the passage of several highly significant
pieces of federal toxic control legislation. (footnotes omitted)

with Townsend, supra note 9, at 874-77 stating that "[w]hile some commentators have stated that
'Love Canal was the impetus behind the Superfund law (CERCLA) that President Carter signed in
1980,' in truth, 'the Superfund law was well along the evolutionary path towards enactment before
Love Canal burst into public prominence.'" Id. (footnotes omitted).
22. Theurer, supra note 21, at 78.
clean up the sites they have contaminated.\(^{23}\) PRPs include current owners of waste sites, previous owners, persons who arranged for disposal of waste at the site, and transporters of hazardous waste.\(^{24}\) PRP liability under CERCLA is strict, retroactive, and joint and several, meaning that in some instances PRPs will be liable even when they did not actually cause the release.\(^{25}\)

The clean up process begins with the discovery of a contaminated site or with the notification of a release of hazardous substances.\(^{26}\) Sites are discovered by “citizens, state agencies, and EPA regional offices.”\(^{27}\) Once a site is discovered, it is entered into the Comprehensive Environmental Response, Compensation and Liability Information System (“CERCLIS”), which is the EPA’s computerized inventory of sites.\(^{28}\) Once the site is identified, various steps are taken to inspect the site and clean it up.\(^{29}\) Once no further response is required to protect human health or the environment, the EPA may delete the site from the National Priorities List (“NPL”).\(^{30}\)

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24. Driesen & Ghosh, supra note 19, at 77 n.90 (citing 42 U.S.C.A. § 9607(a) (West 2005), and stating “[t]he statute only creates liability for past owners who owned a property at the time somebody disposed of waste on that property... Because of broad statutory definitions of disposal, many previous owners might find themselves liable under this provision.”).
25. See Niermann, supra note 8, at 395. In addition, PRPs may be liable even if their only connection to the contaminated site was prior to the enactment of CERCLA. Id. at 396.
26. Environmental Protection Agency, Cleanup Process (Jul. 6, 2006), http://www.epa.gov/superfund/cleanup/index.htm (last visited Nov. 17, 2007). Depending on the extent and nature of the contamination, CERCLA legislation authorizes either a long term remedial response action, such as those discussed in this article, or a short term/emergency removal. Id.
29. Environmental Protection Agency, Superfund: 20 Years of Protecting Human Health and the Environment (2000), http://www.epa.gov/superfund/20years/20yrpt1.pdf (last visited Nov. 17, 2007). After the site is entered into CERCLIS, the following steps will be taken: 1) a preliminary assessment will be conducted, 2) the site will be inspected, usually through sample collection, 3) the site will be scored based on the hazard ranking system (HRS), 4) if the HRS score is high enough, the site will be listed on the NPL, making it eligible for Superfund funds, 5) a remedial investigation and feasibility study will be conducted to determine the response alternatives, 6) a record of decision will be generated, outlining the clean up plan, 7) remedial designs and remedial actions will be started, 8) construction will be completed, and 9) any post construction will be completed. Id. These steps only apply to Long Term Response Actions (“LTRA”). Id. When an immediate or short term response is required, actions are addressed under the Superfund Emergency Response program. Id. See also Environmental Protection Agency, Cleanup Process, supra note 26.
The issue often comes down to who will clean up the site. Sometimes the EPA begins the immediate clean up of the site and is later reimbursed for its costs by the PRPs through a cost recovery action. In other instances, the EPA will negotiate with the PRPs and have them complete the clean up themselves. When no PRPs can be identified, the site is considered an "orphan site" and is eligible for Superfund financing. The "Superfund," also created by the CERCLA, is a trust fund used to finance the clean up of the most contaminated sites, which are listed on the NPL. The fund was initially created by taxing the chemical and petrochemical industries. However, the CERCLA taxing authority expired on December 31, 1995, and the fund stopped receiving the $4 million per day previously generated by the tax. Those funds have already been used, and today, 100% of the appropriations for the fund are obtained from general revenues. This means that financing for the clean up of these sites falls heavily on PRPs and taxpayers.

300.425(e) of the National Contingency Plan ("NCP") states that a site may be deleted from the NPL if: 1) the EPA and the State determine that the parties have implemented all appropriate response actions; 2) the EPA after consulting with the State determines that all appropriate Superfund financed responses have been implemented and no further response is appropriate; or 3) a remedial investigation has shown that the release poses no significant threat to public health or the environment. When a site meets one of these requirements, the Regional Administrator will approve a close-out report. Once the Regional Office gets a state concurrence, the EPA publishes a notice of intent to delete in the Federal Register and in a major newspaper near the site. The public has a period in which to comment, and then the EPA responds. If the site warrants deletion, the EPA publishes a notice in the Federal Register. If further remedial action is required in the future the deleted site will remain eligible for further Superfund financed remedial action.

31. Driesen & Ghosh, supra note 19, at 77 n.89 (citing 42 U.S.C. §§ 9604(a)(1), 9606(a), 9607(a), 9622(a) (West 2005)).
32. Driesen & Ghosh, supra note 19, at 77 (citing 42 U.S.C.A. §§ 9604(a)(1), 9606(a), 9607(a), 9622(a) (West 2005)).
33. Environmental Protection Agency, How Sites Are Placed on the NPL, http://www.epa.gov/superfund/programs/npl_hrs/nplon.htm (last visited Nov. 17, 2007). Adding a site to the NPL involves a specific statutory process: the site is first proposed in the Federal Register, and then the EPA accepts public comments, responds to those comments, and places the site on the list if it meets the requirements.
34. Environmental Protection Agency, CERCLA Overview, supra note 23.
35. Environmental Protection Agency, CERCLA Overview, supra note 23. When it was first enacted, CERCLA created a trust fund of $1.65 billion for five years. It was amended in 1986 by the Superfund Amendments and Reauthorization Act ("SARA"), which created a trust fund of $8.5 billion for five years. This was extended to 1994 through an additional amendment, which authorized an additional $5.1 billion. Environmental Protection Agency, Key Dates in Superfund, http://www.epa.gov/superfund/action/law/keydates.htm (last visited Nov. 17, 2007).
36. Cartwright, supra note 2, at 316.
37. Id. at 318.
38. Id. See also, Niermann, supra note 8, at 416. Some believe that it is fair to impose responsibility for cleanup and associated costs on those connected to the sites (no matter how
C. SARA and the Use of ADR Principles within CERCLA Enforcement Actions

In the early 1980s, the EPA realized "it could more quickly accomplish CERCLA’s objective of cleaning up the nation’s hazardous waste sites by enlisting responsible parties to cooperate in the cleanup effort."39 It sought out negotiated settlements with the parties rather than employing the "more traditional tools of reimbursement actions, court orders, and administrative orders specifically provided for in CERCLA at the time."40

In 1985, the "EPA developed its Interim CERCLA Settlement Policy to" both guide "its regional offices in crafting settlements under CERCLA" and create a "nationally consistent approach" to those settlements.41 Congress also acknowledged the importance of negotiated settlements. When it reauthorized CERCLA through the Superfund Amendments and Reauthorization Act ("SARA") in 1986, Congress retained the general structure of the previous legislation and added provisions for negotiated settlements with the PRPs.42

In 1990, Congress recognized that the EPA could more effectively promulgate regulations by sitting down with the affected parties and creating a joint agreement.43 It passed the Administrative Dispute Resolution Act ("ADRA") to "authorize and encourage Federal agencies to use mediation, conciliation, arbitration, and other techniques for the prompt and informal resolution of disputes."44 The ADRA "requires federal agencies to consider ADR in rulemaking, litigation, enforcement actions, licensing and permitting, and formal and informal adjudications."45

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39. Niermann, supra note 8, at 391 (footnotes omitted).
40. Id.
41. Id.
42. Id. at 394-95.
44. Id. at 414 (citing Lynn Peterson, The Promise of Mediated Settlements of Environmental Disputes: The Experience of EPA Region V, 17 COLUM. J. ENVTL. L. 327, 328 (1992)).
45. Id. (citing Stephen Crable, ADR: A Solution for Environmental Disputes, 48 ARB. J. 24, 24 (1993)). See also Niermann, supra note 8, at 392. Niermann states, "The Administrative Dispute..."
In 1987, the EPA issued its *Final Guidance on Use of Alternative Dispute Resolution Techniques in Enforcement Actions*. The introduction discusses its intent to move from negotiated settlements to the use of additional ADR principles. It states:

Traditionally, the Agency's enforcement cases have been settled through negotiations solely between representatives of the Government and the alleged violator. With a 95 percent success rate, this negotiation process has proved effective, and will continue to be used in most of the Agency's cases. Nevertheless, other means of reaching resolution, known collectively as alternative dispute resolution (ADR), have evolved. Long accepted and used in commercial, domestic, and labor disputes, ADR techniques, such as arbitration and mediation, are adaptable to environmental enforcement disputes. *These ADR procedures hold the promise for resolution of some of EPA's enforcement cases more efficiently than, but just as effectively as, those used in traditional enforcement.*

The introduction also makes it clear that the EPA's use of these processes would allow it to be just as vigorous in its enforcement methods:

EPA does not mean to indicate that by endorsing the use of ADR in its enforcement actions, it is backing away from a strong enforcement position. On the contrary, the Agency views ADR as merely another tool in its arsenal for achieving environmental compliance. EPA intends to use the ADR process, where appropriate, to resolve enforcement actions with outcomes similar to those the Agency reaches through litigation and negotiation. *Since ADR addresses only the process (and not the substance) of case resolution, its use will not necessarily lead to more lenient results for violators; rather, ADR should take EPA to its desired ends by more efficient means.*

The EPA's *Final Guidance* went on to discuss the characteristics of the types of Superfund enforcement cases in which ADR principles will be most beneficial. It states that ADR principles should be used in the event of impasse or the potential for impasse, in light of resource considerations, and when remedies affect parties not subject to an enforcement action.

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Resolution Act of 1990 (ADRA) buttressed EPA policy by expressly authorizing and encouraging the use of ADR in lieu of traditional adjudication by all federal agencies. *The ADRA requires an agency to consider using ADR before initiating litigation, but it emphasizes that ADR must be entered into voluntarily.*” *Id.* (footnotes omitted).


47. *Id.* (emphasis added).

48. *Id.* at 1 (emphasis added). The EPA lists four methods of ADR principles it specifically intends to use in its Superfund enforcement cases: mediation, arbitration, fact finding, and mini trials. *Id.* at 16. It discusses in depth where each method is most appropriately used. *Id.*

49. *Id.* at 4-6. It says impasse or potential for impasse can involve:

(1) Personality conflicts or for communication among negotiators;

(2) Multiple parties with conflicting interests;

(3) Difficult technical issues which may benefit from independent analysis;

(4) Apparent unwillingness of a court to rule on matters which would advance the case toward resolution; or

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suggests that the use of ADR principles should be considered prior to referring a case to the Department of Justice.\textsuperscript{50} It stresses that, although ADR principles may be used at any point in a case's development, it is best to use the principles as early as possible "to avoid the polarizing effect which frequently results from long and intense negotiations or the filing of a lawsuit."\textsuperscript{51}

III. ANALYSIS

A. ADR is More Efficient than Litigation within Most CERCLA Actions

As previously stated, the continued use of ADR principles has been instrumental within CERCLA enforcement actions and has made the "Superfund enforcement process less time-consuming and costly" than when litigation and other traditional methods are used.\textsuperscript{52} Litigation has proven inadequate in most CERCLA cost recovery and contribution actions because it often causes transaction costs that equal or exceed the costs of remediation at the site.\textsuperscript{53} CERCLA cost recovery actions tend to be extremely complex...
and involve multiple parties, demanding enormous time and resources, and requiring "immediate steps to address [the] environmental contamination." Thus, ADR is better suited to these types of actions.\textsuperscript{54} ADR principles have been used to avoid years of potential litigation, allowing the EPA to focus its efforts on "protecting public health and the environment rather than" litigating disputes.\textsuperscript{55}

The use of ADR principles allows the EPA to reach settlements more quickly on terms more favorable to responsible parties.\textsuperscript{56} When litigation is used, the parties must navigate "strict procedural formalities and an adversarial environment."\textsuperscript{57} Alternatively, the more collaborative approach "of ADR promotes settlement by encouraging parties to search for solutions that accommodate their [individual] interests," allowing them to consider solutions that may not be available within traditional court proceedings.\textsuperscript{58} Settlements are achieved faster and allow parties to proceed to cleaning up sites more quickly, ensuring protection of human health and the environment.\textsuperscript{59} Faster settlements also mean that the contaminated properties are available for economic development sooner.\textsuperscript{60}

In 1990, EPA Deputy Administrator released a policy statement which said:

... I believe that enforcement officials should consider the option of using ADR as a standard component of our enforcement program, and use ADR where appropriate. . . . It is my belief, that ADR allows the Agency significant resource savings in appropriate cases, and that we cannot afford to turn our backs on this fact.

By 1994, the Clinton Administration was working to officially reform the CERCLA legislation to minimize lawsuits through the proposed Superfund Reform Act ("SRA").\textsuperscript{62} One of the proposed measures was to require the use of ADR principles rather than litigation.\textsuperscript{63} This measure was not passed, and the use of ADR principles is still voluntary although the EPA's consolidated rules grant the power to the presiding judge to "require

\hypertarget{supernfundandtransactioncosts}{
\textbf{SUPERFUND AND TRANSACTION COSTS: THE EXPERIENCES OF INSURERS AND VERY LARGE INDUSTRIAL FIRMS 46 (1992)).}

\textsuperscript{54} Statement of Lois J. Schiffer, supra note 52; see also Eric R. Max, Confidentiality in Environmental Mediation, 2 N.Y.U. ENVTL. L.J. 210, 213 (1993).

\textsuperscript{55} Statement of Lois J. Schiffer, supra note 52.

\textsuperscript{56} Id.; see also Max, supra note 54, at 213.

\textsuperscript{57} Niermann, supra note 8, at 414.

\textsuperscript{58} Id.

\textsuperscript{59} Statement of Lois J. Schiffer, supra note 52.

\textsuperscript{60} Id.


\textsuperscript{62} Id. See also Niermann, supra note 8, at 402-08 (for a more comprehensive explanation of the proposed SRA and its provisions).

\textsuperscript{63} Id.
parties to attend conferences for the settlement or simplification of the issues, or the expedition of the proceedings.\footnote{64}

Although it is not a requirement, the use of ADR principles as an alternative to litigation has become quite popular. A 2004 report titled *Natural Resource Damage Assessments as Related to Department of Energy Site Clean up Concerns: A Preliminary Review* states:

Although [Natural Resource Damage] lawsuit and settlement information is publicly available on only a small number of Superfund sites, a separate study found that that the size of the settlements are increasing and tend to double every three to four years. The total NRD payout rose rapidly over the 1990’s from almost nothing in the 1980’s to an average of approximately $100 million per year between 1998 and 2001. The number of settlements also rose during this period, but has since stabilized at about 15-20 per year. The largest CERCLA related settlement was approximately $130 million and was for a partial settlement for mining/smelting injuries at Clark Fork River in Montana (Smith 2003).\footnote{65}

Some criticize the use of ADR within CERCLA actions because they believe “it tends to favor the party with more resources”\footnote{66} because it states that mediation is only proper “when there is a relative balance of power between the parties.”\footnote{67} However, the party with the most resources does not always come out “ahead” by the use of the mediation process. In 1997, the Office of Administrative Law Judges (“OALJ”) conducted a pilot on roughly fifty cases that were pending before it and found that mediation allows the parties to develop a compromise resolution that reflects their respective interests.\footnote{68} These compromise resolutions did not tend to favor

\footnotesize{\begin{itemize}
\item 64. 40 C.F.R. § 22.4 (c)(8) (1999). \textit{See also} Cushman, \textit{supra} note 61, at A1 (citing In re Geron Furniture, Inc. 1994 EPA ALJ LEXIS 53 (1994), which states that the rules, including 40 C.F.R. § 22.18, encourage settlement).
\item 66. Clagett, \textit{supra} note 43, at 422.
\item 67. \textit{Id.} at 422-23 (citing Tom Melling, \textit{Bruce Babbitt’s Use of Governmental Dispute Resolution: A Mid-Term Report Card}, 30 LAND & WATER L. REV. 57, 84 (1995); DOUGLAS J. AMY, \textit{THE POLITICS OF ENVIRONMENTAL MEDIATION} 80-82 (1987)). Supposedly this power balance “only occurs in about ten percent of environmental conflicts.” \textit{Id.} at 423.
\end{itemize}
the party with the most resources—in fact, the OALJ found quite the opposite result. In litigated cases, judges typically can only impose civil penalties on the parties. However, in mediation, the parties can agree that the civil penalty will be reduced if the responsible party implements a Supplemental Environmental Project ("SEP") that benefits the environment and exceeds the requirements of applicable environmental laws. The OALJ found that the responsible parties typically spent more money on the SEPs than they received as a reduction of their civil penalties and that the benefits went directly to the area damaged by the parties rather than into the general coffers. Through the mediation process, the OALJ also found that responsible parties came to view the adoption of corrective measures at the contaminated sites as representing their own self-interest. As a result, the parties saved the time and expense of litigation and were able to produce results that reflected their basic concerns.

B. History of Three Superfund Sites as Illustrations of Successful Use of ADR

There are many examples of CERCLA cases that have used ADR principles such as mediated settlements, rather than litigation, to efficiently resolve disputes between multiple parties on multiple issues. As the cases studied below illustrate, the use of ADR principles allows parties to reach carefully crafted settlement agreements and cover a majority of the costs of remediation without the use of the Superfund.

69. Id.
70. Id.
71. Id.
72. Id.
73. Id.
74. The following are examples of CERCLA sites that have used ADR principles to resolve disputes: Bridgeport Rental and Oil Services, Inc; Superfund Site in Logan Township, NJ; GE/Housatonic Superfund Site in Pittsfield, MA; Helen Kramer Landfill Superfund Site in Mantua Township, NJ; Auburn Road Landfill Superfund Site in Londonberry, NH; Landfill & Resource Recovery Site in Coventry, RI; Iron Mountain Mine Site in Redding, CA; Milltown Reservoir Sediments/Clark Fork River Superfund Site in Milltown, MT; Southeast Rockford Groundwater Contamination Superfund Site in Rockford, IL; and Rocky Flats Plant (USDOE) Superfund Site in Golden, Colorado. For a more complete list, see Status Report on the Use of ADR, supra note 68, at 21-66.
1. The Bridgeport Rental and Oil Services, Inc. Superfund Site

The Bridgeport Rental and Oil Services, Inc. ("BROS") Superfund site\(^\text{75}\) is a thirty-acre property located in Logan Township, New Jersey, approximately one mile east of the town of Bridgeport and two miles south of the Delaware River.\(^\text{76}\) It was "used as a waste oil collection facility and chemical waste storage site" for approximately thirty years.\(^\text{77}\) When it was closed in the late 1970s, millions of gallons of toxic waste were left at the site, "much of it in a thirteen acre lagoon that had become a 'toxic soup' of waste material."\(^\text{78}\) The site contained volatile organic compounds ("VOCs"), polychlorinated biphenyls ("PCBs"), and heavy metals, including lead, cadmium, chromium, and barium.\(^\text{79}\) Spills and leaks from the site had "contaminated groundwater and adjacent wetlands."\(^\text{80}\) The dangerous condition of the site was finally realized in 1979 when "a chemical fire swept across the area, rocketing cylinders through the air and engulfing the site in a black toxic cloud."\(^\text{81}\) Due to the severe conditions at the BROS site, it is considered "one of the most technically challenging sites to be addressed by [the] EPA under the Superfund program."\(^\text{82}\)

The parties involved in remediation of the site were representatives of the DOJ, the EPA, the New Jersey Department of Environmental Protection ("NJDEP"), the New Jersey Attorney General's office, and over ninety private parties.\(^\text{83}\) A settlement was reached after two years of negotiations

\(^{75}\) N.J. Office of Envtl. Prot., New Jersey Superfund Sites on the National Priorities List (2005), http://www.state.nj.us/dep/srp/superfund/npl/npl200507.pdf (last visited Nov. 17, 2007). BROS is just one of many Superfund sites in the state of New Jersey. As of April 2007, New Jersey had 113 final sites on the NPL list, including the BROS Superfund site. Id.

\(^{76}\) Environmental Protection Agency, Superfund: 20 Years of Protecting Human Health and the Environment, supra note 29.


\(^{78}\) Id.

\(^{79}\) Environmental Protection Agency, Superfund: 20 Years of Protecting Human Health and the Environment, supra note 26.

\(^{80}\) U.S. Dept't of Justice Office of Pub. Affairs, supra note 77.

\(^{81}\) Environmental Protection Agency, Superfund: 20 Years of Protecting Human Health and the Environment, supra note 29.

\(^{82}\) U.S. Dept't of Justice Office of Pub. Affairs, supra note 77.

\(^{83}\) N.J. Office of Envtl. Prot., New Jersey Superfund Sites on the National Priorities List, supra note 75. See also U.S. Dept’t of Justice Office of Pub. Affairs, supra note 77.
which were assisted by professional mediators. The parties agreed to contribute a minimum of $221.5 million to help cover the cost of cleaning up the site. Under the settlement agreement, the private companies agreed to complete the remaining remedial work which included clean up of the groundwater and wetlands affected by contamination from the site. The parties agreed that if the groundwater and clean up costs exceeded the amount set forth in the agreement, the EPA would share those costs, but if the costs were less than the amount set forth in the agreement, the balance would be paid to the EPA and the NJDEP to further reimburse them for past costs. The private companies also agreed "to design and implement the selected wetlands remedy." Again, if the implementation were to cost more than $10 million plus interest, the EPA would cover all additional costs, but if the costs were less than the amount agreed upon, then the balance would be paid to the EPA and the NJDEP to reimburse them for past costs. The settlement agreement also included a unique risk-sharing provision where in the event of any unforeseen future clean up needs, if some of the responsible private companies had become defunct or financially insolvent, the EPA would share in the clean up costs.

Once the settlement was reached, the responsible parties immediately paid $115.5 million to the EPA and the NJDEP to reimburse them for past clean up costs, $46 million of which was contributed by the private companies. Lois J. Schiffer, Assistant Attorney General for the DOJ’s Environment and Natural Resources Division, stated, "[T]his complex settlement is the result of effective mediation led by an experienced third-party neutral, along with a sizeable financial contribution by the federal government." The settlement, one of the largest ever under the CERCLA legislation, covered approximately 70% of the clean up costs at the BROS site.

Clean up of the site was substantially complete in 1996. More than 172,000 tons of hazardous waste was safely removed from the lagoon, more than 190 million gallons of contaminated water was treated, and more than

84. Id. See also U.S. Dep’t of Justice Office of Pub. Affairs, supra note 77.
86. Id.
87. Id.
88. Id.
89. Id.
90. Id.
92. Id.
93. Id.
94. Id.

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10,000 tons of contaminated debris was disposed of off-site. In addition, a waste oil recycling facility and tank farm, which had included 100 abandoned tanks containing 400,000 gallons of waste, were dismantled. Finally, the "EPA and NJDEP also installed individual carbon filtration units for more than thirty families whose private wells had been contaminated by the site, and later constructed an alternate drinking water supply system for the public." The EPA is still working to ensure that contaminated groundwater migration is under control at the site, but the potential or actual human exposures at this site are currently under control. New Jersey Attorney General Peter Verniero stated, "This is a good example of how alternative dispute resolution can bring positive results."

2. The General Electric/Housatonic River Superfund Site

The General Electric/Housatonic River Superfund site is located in Pittsfield, Massachusetts. From the 1930s to the late 1970s, General Electric ("GE") used PCBs as insulating fluids to manufacture its transformers and disposed of them according to the legal industry standard—through on-site disposal and release into the Housatonic River. In 1979, Congress banned the use of PCBs, and GE discontinued use of them according to law. However, the GE plant area and Housatonic River remained extremely contaminated.

In 1981, GE acknowledged its responsibility for the contamination. However, very little progress was made until 1997 when Pittsfield residents...
learned that their yards were contaminated with PCBs due to yard fill that GE had given to employees for free during the 1940s and 1950s. At this point, the EPA’s Intergovernmental Team began negotiations with GE. After negotiations regarding the clean up of the river reached an impasse, the parties began a serious search for mediators and agreed upon Howard Bellman and Greg Sobel. "In addition to helping the parties negotiate the settlement, the mediators facilitated an unusual one-day public input session at which representatives of citizen, environmental, and business groups were invited to present their concerns to the negotiators." 

In 1998, the mediators facilitated an agreement among nine government agencies and General Electric which provided for a $200 million clean up. Under this agreement, GE agreed to remediate the 250-acre Pittsfield plant site, a nearby school, and several commercial properties. It agreed to remove contaminated sediment from the half mile stretch of the Housatonic River near the GE Pittsfield plant and fund a majority of the anticipated cost of an additional one and a half mile of river clean up to be conducted by the EPA. Additionally, GE agreed to select and implement a clean up plan for the downstream portions of the river. It agreed to remedy injuries to natural resources caused by the release of hazardous materials downstream extending into Massachusetts and Connecticut. It also agreed "to conduct a number of projects to acquire or enhance wildlife habitats," and to pay $15 million in damages to be used by the natural resource trustees (i.e. U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, and agencies of Massachusetts and Connecticut) to restore

105. Id. at 579. Community outrage increased when the residents learned that an engineer had warned GE about the possible contamination of the yard fill as early as 1981, and that GE hadn’t provided any notice of the situation. Id.
106. Id. at 579-80.
107. Environmental Protection Agency, GE to Spend $200 Million on Cleanup of Housatonic River, supra note 100, at 10.
109. Environmental Protection Agency, GE to Spend $200 Million on Cleanup of Housatonic River, supra note 100, at 1.
110. Id. at 4.
111. Id. at 1. These clean ups included the river banks and soils in the properties in the floodplain along the river. Id. See also Moore, supra note 101, at 580-81.
112. Environmental Protection Agency, GE to Spend $200 Million on Cleanup of Housatonic River, supra note 100, at 4.
113. Id.
the equivalent of the injured natural resources. Finally, GE agreed to determine whether remediation would be necessary on an additional twelve mile stretch of the river. Following this settlement agreement, the EPA stated, “One of the unheralded successes of the GE settlement . . . has been the role of alternative dispute resolution (ADR) in achieving a long-sought agreement among the nine government agencies involved and GE.”

So far, GE has carried out the agreement as planned by completing excavation of the upstream portion of the site and working towards remediation of the downstream portion. It has made progress in remediation of the site surrounding the plant as well; 175 residential properties have been successfully cleaned up as well as several commercial properties. It has begun redevelopment of the fifty-acre portion of the former GE plant, along with the Pittsfield Economic Development Authority (“PEDA”), which will include a little league baseball field. The EPA continues to hold meetings for the Citizens Coordinating Council and encourages the public to give their input on the redevelopment.

3. Helen Kramer Landfill Superfund Site

The Helen Kramer Landfill Superfund site, one of the largest in the country, stretches sixty-six acres in Mantua Township, New Jersey. It was a privately owned landfill which originally received municipal waste, municipal construction debris, and non-chemical industrial waste. However, “in the 1970s, the landfill received millions of gallons of hazardous waste, including chemical wastes, solvents, paints, . . . septic and

114.  Id.
115.  Id.
116.  Id.
117.  Id.
119.  Id.
120.  Id.
123.  Ayala, supra note 121.
hospital wastes," and "more than two million cubic yards of municipal solid waste." The waste was more than fifty feet thick in most areas. The landfill was eventually closed in 1980 due to permit violations.

Conditions at the site were dangerous because of the exposed waste, surface rifts, and sharp objects in the landfill. In 1981, several fires broke out at the landfill, including an underground fire that burned for two months and emitted toxic fumes into surrounding areas. Investigations detected airborne contaminants at the site. Investigations also revealed chlorinated organics, heavy metals in the groundwater, and surface water down-gradient of the landfill which meant that both the drinking water and irrigation water were contaminated.

The responsible parties included approximately 250 private companies and forty-four municipalities. Originally, the EPA attempted to litigate a cost recovery action, but the judge stayed the litigation for four years to allow the defendants to perform an allocation of liability. When the allocation stalled, the government resumed the litigation, prompting serious settlement negotiations to begin. However, the defendants were still unable to agree upon the allocation. The court ordered mediation, and the mediators became actively involved in the case. They helped the defendants "deal with a large orphan share, de minimis parties, defunct companies, insurance companies, ... and [numerous] municipalities, including the City of Philadelphia."

124. Id.
125. Id. See also Environmental Protection Agency, GE/Housatonic River Site: Introduction, supra note 117.
126. Ayala, supra note 121.
127. Id.
129. Environmental Protection Agency, NPL Site Narrative for Helen Kramer Landfill, supra note 128.
130. Id.
133. Id.
134. Id.
135. Id.
136. Id.
In 1998, the EPA and the NJDEP agreed to a settlement with more than 200 parties in excess of $100 million.137 Federal response costs and interest was roughly $123 million, and the government recovered $95 million under the settlement.138 State response costs were approximately $14 million, and roughly $10 million was recovered under the settlement.139 In addition, the settling parties agreed to complete some of the remediation themselves. The settling private companies “agreed to operate and maintain the site for . . . 26 years, saving the State an estimated $1.5 million per year.”140 The settling parties also agreed to replace wetlands lost at the landfill by purchasing 151 acres of wetlands for the Township of West Deptford.141 The total recovery for past and future costs at the Helen Kramer Landfill site exceeds 90%.142 The EPA’s newsletter noted, “the final settlement . . . represents the recovery of approximately 100% of actual, out-of-pocket costs and about 80% of EPA’s response costs, indirect costs, and interest of $28 million.”143 Clean up of the site has been completed although operational activities are ongoing.144 At approximately the same time as the negotiations and settlement, the parties took over the long term operation and maintenance of the Helen Kramer site.145 This includes “operation of the leachate and gas collection systems and the two associated treatment plants, maintenance of the cap and surface water controls, and environmental monitoring.”146 A

137. Id.
138. Ayala, supra note 121.
139. Id.
140. Id. Peter Vemiero, Attorney General of New Jersey, said, “These settlements represent a significant recovery for the State. By requiring the defendants to operate and maintain the site for the next 26 years, we will save the taxpayers more than $39 million in future costs associated with the site.” Id.
141. Id., supra note 121.
142. Id. Note that the long term remedy for the site “included installation of a 81.5 acre cap over the [s]ite and construction of a slurry wall[,] surrounding the entire [s]ite[,]” which ranges between twenty and seventy feet in depth and greater than one and a half miles in length. Id. Leachate and gas collection treatment systems were also installed, and pretreated waste is discharged to a sewage treatment plant. Id. Monitoring has shown “that the remedy has effectively prevented the uncontrolled release of contamination from the former landfill into the environment.” Id.
143. Environmental Protection Agency, ADR Closes the Deal at Helen Kramer Landfill, supra note 131, at 9.
145. Id.
146. Id.

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2005 review of the site found that the remedial actions taken were "protective of public health and the environment." 147

This settlement shows ADR principles are capable of efficiently addressing the allocation of responsibility among hundreds of parties. 148 Steven A. Herman, the EPA Assistant Administrator for the Office of Enforcement and Compliance Assurance, stated, "Not only does it resolve protracted litigation and allow nearly all the contributors of waste to the site to completely resolve their liability to the United States for the contamination, but even more importantly, it will preserve the Superfund for use at other hazardous waste sites." 149

C. The Superfund Has Been Depleted But ADR is Helping the EPA Cover Costs

As discussed above, there have been major problems with the CERCLA funding in recent years. As the Superfund program grows, the size, complexity, and cost of sites continue to grow. 150 As of 2005, more than 50% of the program's budget was devoted to only eight complex sites. 151 This, combined with the exhaustion of funds generated from the former CERCLA tax, means that several sites ready for construction were not able to be funded in the last few years. However, the program has begun to look to the PRP settlements, such as those discussed above, to assist with its funding needs. 152 As shown above, the use of mediated settlements among the PRPs can mean that between 70% and 100% of out of pocket costs can be recovered allowing the sparse funds allocated to the Superfund program to be used to finance the clean up of orphan sites. These PRP settlements have provided a significant amount of funding for clean up of the sites.

147. Id.
148. Ayala, supra note 121, at x (in which Lois J. Schiffer, the U.S. Assistant Attorney General for Environment and Natural Resources stated, "We encourage companies to step forward when the invitation comes to resolve their liability through discussion rather than litigation." She went on to state, "The federal government will vigorously enforce the law in these cases so that society will not be forced to bear the costs of hazards produced in the past by polluters who have profited from commerce involving hazardous substances. However, we will work with parties who seek to allocate their collective responsibility in a fair manner.").
149. Ayala, supra note 121.
151. Cartwright, supra note 2, at 317.
152. Environmental Protection Agency, Superfund National Accomplishments Survey Fiscal Year 2004, supra note 150. In the early years of the program, approximately 70% of the clean ups were conducted by the federal government; but, the numbers have reversed, and now 70% are being conducted by the PRPs. See statement of Lois J. Schiffer, supra note 52.
adding to approximately $18 billion over the life of the Superfund program.\textsuperscript{153}

In addition to funding problems, CERCLA is often criticized for the extensive transactions costs it causes for the parties. However, ADR seems to be helping in this area as well. PRP settlements have been steadily increasing since the 1980s, partly because of the EPA's guidance on the issue but also because precedent has been established over time.\textsuperscript{154} As more and more issues have been decided, attorneys have become better able to "predict likely outcomes of allocation disputes" and settle cases more easily.\textsuperscript{155} It has recently been noted that the high number of settlements have contributed to an overall decline in transaction costs for the parties.\textsuperscript{156} Now that the precedent has largely been set, ADR principles can be used to avoid litigation, benefiting the parties, who pay lower transaction costs, and the EPA, which can focus its efforts to protect the environment instead of litigating complex and time-consuming disputes.\textsuperscript{157}

IV. CONCLUSION

Although CERCLA has many flaws, it is an essential program that has benefited greatly from the use of ADR principles. Although the program is currently underfunded, many sites that would potentially be ignored are being cleaned up through the use of mediated settlements and other ADR principles. The settlements at the BROS Superfund site, the GE/Housatonic River Superfund site, and the Helen Kramer Landfill Superfund site are examples of ways that ADR can be used successfully. They serve as guidance for ways that ADR principles can be used to remediate future Superfund sites during times when the fund itself cannot adequately cover the costs. The fact that ADR continues to be used successfully to resolve these disputes and that the size of mediated settlements is doubling every

\textsuperscript{153} Environmental Protection Agency, Superfund: 20 Years of Protecting Human Health and the Environment, supra note 29.

\textsuperscript{154} Driesen & Ghosh, supra note 19, at 78 n.96 (citing Robert P. Dahlquist, Making Sense of Superfund Allocation Decisions: The Rough Justice of Negotiated and Litigated Allocations, 31 ENVTL. L. REP. 11098, 11108 (2001)). Although litigation of CERCLA cases can be problematic, as previously mentioned, parties still have incentive to litigate unresolved matters of law. See generally, Nierman, supra note 8, at 420.

\textsuperscript{155} Driesen & Ghosh, supra note 19, at 78 n.96 (quoting Dahlquist, supra note 154, at 11108).

\textsuperscript{156} Driesen & Ghosh, supra note 19, at 78.

\textsuperscript{157} Statement of Lois J. Schiffer, supra note 52.
three to four years is encouragement that, although funding is short, the CERCLA program will continue to protect human health and the environment for years to come.