

# CRS Report for Congress

Received through the CRS Web

## Superfund and Natural Resource Damages

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### Summary

The Superfund law gives government agencies that serve as natural resource trustees the authority to require responsible parties to make good the environmental harm they caused by restoring or replacing the injured natural resources, and by paying damages for the lost use of publicly owned resources. This is in addition to EPA's authority to require the cleanup of spills and contamination from hazardous substance releases. Natural resource damages (NRD) has become an issue because of very large claims that have been filed, and because of the prospect of more of them. Key questions are: (1) what costs should be included and how they should be measured; (2) who should bear the burden of proof in NRD cases (the rebuttable presumption question); and (3) when NRD cases go to court, should review be based solely on the compiled administrative record, or should the parties be permitted to introduce new evidence? This report will be updated as events warrant.

Amending the natural resource damages (NRD) provisions of the Superfund law has been one of the most intractable issues in the reauthorization debate. While best known as the nation's principal law for cleaning up spills and contamination from hazardous waste sites, Superfund (formally known as the Comprehensive Environmental Response Compensation and Liability Act – CERCLA),<sup>1</sup> also obliges potentially responsible parties to make good the environmental harm they have caused on government lands and waters, by restoring or replacing the injured natural resources, and by paying damages<sup>2</sup> for the lost use of publicly owned resources.<sup>3</sup> (See page 2 for examples of natural resource injuries.)

**Background.** CERCLA (at 42 U.S.C. 9601(16)) defines natural resources broadly to include land, fish, wildlife, ground water, and other resources belonging to or managed by federal or other governmental entities. The provisions establishing liability for restoration of

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<sup>1</sup> P.L. 96-510 (December 11, 1980; 42 U.S.C. 9601-9675)

<sup>2</sup> In this paper “damages” refers to financial compensation, and does not mean “injury” or “harm.”

<sup>3</sup> The Oil Pollution Act also provides for the recovery of natural resource damages, as do certain state laws.

### Examples of Injuries to Natural Resources

What kinds of incidents result in injuries to natural resources, and what exactly is injured? The web sites of the Department of the Interior, the Fish and Wildlife Service (part of Interior) and the National Oceanic and Atmospheric Administration (NOAA) list 86 NRD cases. A review of 46 of them for which information was electronically available found the following:

- ' 15 sites where decades of industrial activities were accompanied by releases of a variety of hazardous substances into rivers, harbors, marshlands and other wetlands, as well as one case of disposal to the ocean.
- ' 11 sites where mines and associated waste piles contaminated surface waters and groundwater with acid drainage and leachate containing heavy metals.
- ' 9 cases where vessels ran aground; in three of them oil was the cargo that spilled, in three others the ships' own fuel spilled, and in the other three incidents the ships ran onto coral reefs causing damage to the reef.
- ' 4 oil pipeline ruptures.
- ' 2 cases where retaining walls ruptured, allowing gypsum slurry to be released into a bayou in one case, and sewage into a river in the other.
- ' 2 incidents where train derailments resulted in a spill of diesel fuel, and a spill of chemicals.
- ' 2 oil well accidents that released oil and other liquids into bayous.
- ' 1 case where containers of a toxic chemical were lost overboard in rough seas.

Except for the coral reef groundings, these incidents all involve spills of oil or releases of hazardous substances into bodies of water. In addition to surface and ground water contamination the harm incurred includes injuries to and death of fish, wildlife, and other biota, contamination of their habitats (including breeding and spawning grounds), and pollution of drinking water supplies.

Federal agencies, along with state and tribal governments, act as trustees for public lands, as well as for protected wildlife and plants (e.g., endangered species and migratory birds). NOAA is the trustee for the nation's coastal and marine environment, including commercial and recreational fisheries, anadromous fish, and marine mammals. States have traditionally acted as trustees for groundwater, their own lands (e.g., state parks and forests), and fish, game, and other wildlife.

Sources: For the Department of the Interior: [<http://restoration.doi.gov/caselist.htm>]; for the Fish and Wildlife Service: [<http://contaminants.fws.gov/Issues/Restoration.cfm>]; and for the National Oceanic and Atmospheric Administration: [<http://www.darp.noaa.gov/darpcase.htm>]. Other agencies of Interior do not list NRD cases on their web sites.

the resources are not available to private citizens and their property.<sup>4</sup> Only public resources are covered, and the law makes federal, state, and tribal governments their trustees on behalf of the public. The principal federal trustees are the agencies with stewardship over the nation's land and water – the Fish and Wildlife Service, National Park Service, Bureau of Land Management (all three in the Department of the Interior), the Forest Service (Department of Agriculture), and the National Oceanic and Atmospheric Administration

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<sup>4</sup> “Although private parties do not have a statutory cause of action for natural resource damages, they may assert similar claims under common law theories, such as negligence and strict liability.” Bradley M. Marten and Cestjon L. McFarland. “Litigating CERCLA Natural Resource Damage Claims,” *Environment Reporter*. July 19, 1991. p. 671.

(Department of Commerce). The Departments of Defense and Energy also have large areas of public land under their jurisdiction for which they act as trustee.

Natural resource damages are residual to cleanup, that is, they can only be sought for injuries remaining after the response action is complete or the likely effects of the remedy have been taken into account. “Residual injuries occur when (1) a cleanup leaves significant contamination of the environment or (2) animal populations have been reduced or wildlife habitat has been destroyed and cannot recover quickly without human intervention.”<sup>5</sup>

There are three basic cost components of an NRD claim: (1) the cost of performing the damage assessment; (2) the restoration costs of bringing the resource back to the condition that otherwise would exist today, taking into account the effects of time and natural and human activities; and (3) the costs associated with the loss of the resources and the benefits they provide. The damages recovered may be used “only to restore, replace, or acquire the equivalent of” the subject natural resources (42 U.S.C. 9607(f)(1)). Recovered funds may not go into the general revenues of the federal or state government, for example. They are compensatory and remedial, with no punitive element.

The issue was brought to the fore by some very large NRD claims (in the multi-hundred million dollar range) that were filed in the 1990s. (See page 4 for examples.) The companies that were sued felt that the NRD provisions were being applied unfairly and contrary to Congress’s original intent.

In an effort to achieve the bipartisan support that experience has shown is needed to move a CERCLA reauthorization bill, the bills introduced in the 106<sup>th</sup> Congress by the chairmen of the committees and subcommittees with Superfund jurisdiction – H.R. 1300, H.R. 2580, and S. 1090 – did not contain NRD provisions. However the absence of NRD language – and the inability to find an acceptable compromise – was one of the reasons the Senate Environment and Public Works Committee finally ended its deliberations without reporting a bill. One news source quoted Senator Mike Crapo of Idaho, who said, “‘My problem is not so much what is in as what’s out of the bill.’ Crapo explained that his main concern is that natural resource damages are not addressed in the bill, but he also mentioned his disappointment that the bill lacks remedy reforms and contains insufficient liability rewrites.”<sup>6</sup>

Two different purposes are expressed in the cleanup and NRD provisions of CERCLA. First, the Superfund cleanup, or remedial action, is intended to protect human health and the environment from further harm; and second, the natural resource damage measures are intended to restore injured resources, and/or provide substitute resources. Most NRD actions are implemented concurrently with or shortly after the remedial action, and the majority of NRD claims are settled in the context of the remedial action as part of the cleanup agreement negotiated with the Environmental Protection Agency (EPA). A 1996 General Accounting Office (GAO) report found that in almost half the settlements where NRD was an issue, no

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<sup>5</sup> U.S. General Accounting Office. *Superfund: Outlook for and Experience with Natural Resource Damage Settlements*. (GAO/RCED-96-71) April 1996. p. 4. [Hereinafter, GAO report]

<sup>6</sup> Colleen Luccioli. “No Agreements on Senate Superfund Bill; NRD at Issue,” *E & E Daily*. August 2, 1999. See also J. L. Laws. “Senate Panel to Explore Need for Superfund Reform,” *E & E Daily*. March 20, 2000.

separate payment was made, because either the negotiated cleanup would rectify the injury to the natural resource, or no such injuries were found. The Department of Justice reported that through April 1995, of 98 cases settled, 48 involved no payment, and in the other 50, monetary recoveries ranged from about \$4,000 to \$24 million.<sup>7</sup>

Nevertheless, industry groups have expressed concern because some very large natural resource damage claims have been filed, and they would like to clarify what costs are covered by the law, and to have limits placed on what they see as potentially open-ended liability. They are also concerned about the procedural aspects of NRD litigation.

The GAO study noted above reported that the Department of the Interior and the National Oceanic and Atmospheric Administration (NOAA) estimated that 60 sites might result in claims of \$5 million or more each, and as many as 20 of these sites might exceed \$50 million each.<sup>8</sup> Since then there have been some very large suits filed:

- EPA and the Coeur d'Alene Tribe are suing four mining companies for \$970 million to restore injuries from mining wastes in the Coeur d'Alene River Basin, Idaho; the trial is set to begin in January 2001.
- The Montrose Chemical Corp. and other defendants agreed in October 2000 to settle with the Department of Justice for disposal of DDT and PCBs on the ocean floor near Los Angeles; terms of the settlement called for payments of \$43 million for cleanup activities and \$30 million in natural resource damages (\$73 million total), but federal and state agencies sought \$150 million at the start of the trial to cap the 17-square-mile area with sand.
- A partial settlement of \$260 million was reached by the Department of Justice and Atlantic Richfield Corp. in November 1998 for contamination from mining activities in the Clark Fork River Basin, Montana; the suit was for \$767 million when trial commenced, and roughly \$200 million in claims remain.

**Issues.** The controversy over natural resource damages has to do with (1) assessing and valuing the injuries to the natural resource (also referred to as the measure of damages), (2) the rebuttable presumption issue (who should bear the burden of proof), and (3) the related question of record review vs. a new trial.

*Measure of Damages.* CERCLA does not require trustees to use a particular standard or method for assessing natural resource monetary damages. It does, however, call for standard procedures to be developed for all trustees to consider when assessing and valuing the injuries to natural resources. The Department of the Interior promulgated the regulations for land in 1986, and the National Oceanic and Atmospheric Administration issued the rules for coastal and marine areas in 1996. As the law directed (42 U.S.C. 9651(c)), they issued a Type A rule with standard procedures for simplified assessments that require minimal field investigation, and a Type B rule with protocols for conducting assessments in more complicated individual cases. The Type B rule is extensive and contains several valuation

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<sup>7</sup> GAO report. p. 5.

<sup>8</sup> GAO report. p. 5.

methodologies, including contingent valuation, a controversial economic technique to provide monetary values for goods, services, and public programs for which market data do not exist.

In a contingent valuation survey, respondents typically are asked how much they would be willing to pay (in higher prices or in taxes) for a particular good or service. For example, EPA used a contingent valuation survey to estimate the annual benefits of improving visibility at the Grand Canyon by requiring an electric utility to install scrubbers at a cost of about \$100 million annually. EPA's survey estimated total annual benefits of \$130-\$250 million. The utility responded with a contingent valuation survey of its own that showed benefits of only \$50 million. In another case, to determine the lost values caused by the *Exxon Valdez* oil spill, the state of Alaska used a contingent valuation survey that asked how much respondents would be willing to pay in additional taxes to ensure that such an oil spill would not recur within the next 10 years. The state's survey arrived at a median value of \$31 per household, or \$2.8 billion (\$31 times an adjusted number of U.S. households). All three of these studies were subject to criticism by other reviewers.<sup>9</sup>

Some experts assert that, "The results of such surveys can always be questioned, because of the array of possible measurement errors and biases, because of empirical evidence challenging their reliability and validity, and because of incompatibility with market-based use values."<sup>10</sup> Proponents of the technique contend that the methodology is theoretically valid, and that ignoring nonuse values would understate total damages. Opponents argue that because the data collected by contingent valuation surveys are not comparable to traditional measures of price and volume, and because the methodology itself is suspect, the results will always be open to charges of being arbitrary. They also argue that lost use and nonuse damages should not be compensated because the purpose of NRD is only to restore the environment, and the payments should go to government entities, not to individuals who experienced the loss.

This issue has proven particularly challenging in the CERCLA reauthorization debate. After the Senate Environment and Public Works Committee ended its extensive deliberations of S. 1090 in the first session of the 106<sup>th</sup> Congress, Senators John Chafee and Bob Smith, the past and current chairmen, introduced S. 1537 which incorporated changes to the law's NRD provisions. However, the committee did not return to its consideration of Superfund.

The measure of damages under S. 1537 included the reasonable costs of (1) restoring, replacing, or acquiring the equivalent of the injured or lost natural resource to reinstate its human uses and environmental functions; (2) providing a substantially equivalent resource during the period of any interim lost use to the extent that a substitute resource is not reasonably available; and (3) assessing the damages. The bill language eliminated recovery of damages for nonuse values. Instead, it stated that "Where a unique resource has been

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<sup>9</sup> CRS Report RL30242, *Natural Resources: Assessing Nonmarket Values through Contingent Valuation*, p. 9.

<sup>10</sup> *Ibid.*, p. i. For discussions of these difficulties see Peter A. Diamond *et al.*, "Does Contingent Valuation Measure Preferences? Experimental Evidence," and William H. Desvousges *et al.*, "Measuring Natural Resource Damages with Contingent Valuation: Tests of Validity and Reliability," both in *Contingent Valuation: A Critical Assessment*, ed. J.A. Hausman (Amsterdam: North Holland, 1993). Also see Daniel Kahneman and Jack L. Knetsch, "Valuing Public Goods: The Purchase of Moral Satisfaction," *Journal of Environmental Economics and Management*, v. 22 (1992): 57-70.

destroyed, lost, or cannot be restored, the measure of damages may include the reasonable costs of expediting or enhancing the restoration of appropriate substitute resources” (sec. 403). These changes (and others) were based on amendments filed for the markup of S. 1090, and in response to negotiations, but they were insufficient to bring the committee back to formal consideration of Superfund.

*Rebuttable Presumption.* The natural resource trustees (the federal, state, and tribal agencies with responsibility for the resources in question) are not required to use NOAA’s and Interior’s damage assessment rules, but if they do, CERCLA gives them a presumption of correctness – a “rebuttable presumption” – if the case goes to administrative hearing or court. (42 U.S.C. 9607(f)(2)(C)). The rebuttable presumption moves the burden of proof to the defendants (those against whom a claim is made) to show that the trustees and the damage assessment they performed is somehow in error or otherwise lacking. This differs from typical court proceedings, and industry groups feel it imposes an unfair handicap on them. The other side of the argument is that the presumption can be used to promote fairness or to pursue policy goals, such as “to correct the imbalance resulting from one party’s superior access to the evidence, to facilitate the prompt resolution of claims, and to favor certain claims for social and economic reasons.”<sup>11</sup> Speeding matters up also conserves financial resources which could be used to repair the injured resources.<sup>12</sup>

*Record Review versus De Novo Review.* An issue related to the rebuttable presumption question, and one that has been litigated inconclusively is whether the defendants challenging the trustees’ case in court are limited to arguing the record that the trustees have assembled, or whether the case should be argued *de novo*. Industry groups feel record review is prejudicial against them, and denies them a chance to present their evidence in their own way. They argue it thus denies them fair judicial hearing. They want to be able to start fresh in the court proceeding and present their own evidence in their defense. The trustees’ perspective, however, is that the defendants have ample opportunity to present their arguments during comment periods provided by the DOI and NOAA rules. To start over from the beginning in court, they argue, is a burden that is both time consuming and expensive.

**Conclusion.** Changing CERCLA’s NRD language has become a priority for industry groups but the likelihood of near-term amendment is not high. Trustee agencies, who serve as stewards on behalf of the public, argue that those responsible for injuries to natural resources should bear the cost of restoring or replacing them, and that the costs should incorporate those values which do not have a market price. The rebuttable presumption and record review are part of the NRD structure that Congress created in enacting CERCLA, they say. The advocates of change argue that the current system is unfair and places them at great financial risk. The nature of the issue makes it difficult to find a middle ground, and a rewrite might have to be in the context of a full Superfund reauthorization bill where there could be opportunities for negotiation and compromise.

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<sup>11</sup> Frederick R. Anderson. “Natural Resource Damages, Superfund, and the Courts,” *Environmental Affairs*, v. 16, p. 436. 1989. Quoted in Suellen Keiner. “Implications of Proposed CERCLA Reforms for Recoveries of Natural Resource Damages,” *Environmental Law Review*, v. 28, p. 10090. February 1998.

<sup>12</sup> For additional discussion of rebuttable presumptions, see Miriam Montesinos, “It May Be Silly, But It’s an Answer: The Need to Accept Contingent Valuation Methodology in Natural Resource Damage Assessments,” *Ecology Law Quarterly*, v. 26 (1999), no. 1, p. 75-78.