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Superfund: Implementation and Selected Issues

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November 26, 2007

Abstract. The Superfund program had its 25th anniversary in 2005. Although Superfund debate has lessened, as compared with past years, particular aspects of the program continue to generate debate. Policymakers are faced with broad programmatic concerns, as well as more specific issues concerning program implementation. This report discusses some of these questions: Who should pay to clean up the nation's most contaminated sites if responsible parties cannot be found? Is the program receiving enough funding to meet its current and future obligations? How does the statute interact with abandoned hardrock mining sites and animal feeding operations? To supply the context for these issues, this report first provides a background and overview of the Superfund program.





# **Superfund: Implementation and Selected Issues**

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# Summary

Superfund is the federal government's principal program for cleaning up the nation's contaminated waste sites and protecting public health and the environment from releases of hazardous substances. Enacted into law as the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, P.L. 96-510), the program became known as Superfund because Congress established a large trust fund—originally supported by taxes levied on specific petroleum products and chemicals—to provide the majority of the program's funding needs. Although the 26-year-old program has seen less attention compared with earlier years, Superfund issues continue to generate debate. This report provides a background and overview of the Superfund program and examines four topics that received interest in recent years.

The first issue concerns Superfund program funding: who should pay for the program, general taxpayers or a dedicated tax on industry? The program was originally funded by a tax on industry that expired at the end of 1995. Without dedicated taxes, and with a relatively small balance in the trust fund, Congress has been using general revenues for a larger percentage of cleanup funds. Members introduced bills to reinstate the taxes in the current and past three Congresses, but so far these efforts have lacked the necessary support.

The second issue regards Superfund program appropriations. Recent evidence indicates that appropriations from the past several years have fallen short of program needs. The Administration's FY2007 budget proposal for Superfund also fell below levels that, according to some estimates, are needed to meet program obligations. Without reinstating the Superfund taxes, any increased appropriation would be funded through General Treasury revenues.

The third issue involves Superfund interaction with abandoned and contaminated hardrock mines. The number of hardrock mining sites requiring cleanup in future years, particularly those without identifiable responsible parties, could play an important role in the Superfund funding debate. There is also a concern that the threat of CERCLA liability may act as a cleanup disincentive for "good samaritans" who might offer cleanup assistance at abandoned hardrock mines.

The fourth issue concerns Superfund's role at animal feeding operations. Stakeholders argue about whether these operations should be required to report ammonia air emissions, primarily resulting from animal waste, as hazardous substance releases. This issue also concerns the responsibility for releases of animal waste that reach water bodies.

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# Legislative Background

On December 11, 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, P.L. 96-510)<sup>1</sup> to create the hazardous substance cleanup program. The program became known as "Superfund" in reference to the trust fund established by the law. The fund was originally supported by taxes levied on specific petroleum products and chemicals, and a corporate environmental income tax. Until recent years, the Superfund taxes provided the majority of the funding for the needs of the program.

At the time of CERCLA's enactment, other federal environmental statutes provided federal agencies with only limited authority to address contamination at abandoned sites. CERCLA gave the federal government the authority to take direct action to respond to instances involving uncontrolled releases of hazardous substances (or pollutants and contaminants) that may endanger public health or the environment. CERCLA also enables the Environmental Protection Agency (EPA) to compel the persons responsible to clean up their contaminated sites. If the potentially responsible parties (PRPs) cannot be located, or they are unable (generally for financial reasons) to perform cleanup, EPA is authorized to use monies from the Superfund Trust Fund to clean up the site.

CERCLA was expanded and reauthorized by the Superfund Amendments and Reauthorization Act of 1986 (SARA, P.L. 99-499). Amendments after SARA have been narrowly focused. In 1992 and 1996, Congress enacted legislation allowing for easier transfer of military bases with contaminated areas to local entities. In 1996 and 1999, Congress provided conditional liability exemptions for financial institutions and recycling facilities. In 2002, Congress enacted the Small Business Liability Relief and Brownfields Revitalization Act (P.L. 108-118), which added further liability relief and authorized the Brownfields Program. **Table 1** lists the various CERCLA amendments.

<sup>&</sup>lt;sup>1</sup> CERCLA, as amended, is codified at 42 U.S.C. 9601-9675.

<sup>&</sup>lt;sup>2</sup> SARA also created other authorities, most notably SARA Title III, otherwise known as the Emergency Planning and Community Right-to-Know Act (EPCRA).

Table I. CERCLA and Amendments

(codified generally as 42 U.S.C. 9601-9675)

Year	Act	Public Law Number
1980	Comprehensive Environmental Response, Compensation, and Liability Act	P.L. 96-510
1986	Superfund Amendments and Reauthorization Act	P.L. 99-499
1990	Omnibus Reconciliation Act (extended authorization)	P.L. 101-508, §§ 6301, 11231
1992	Community Environmental Response Facilitation Act	P.L. 102-426
1996	Defense Authorization Act of Fiscal Year 1997	P.L. 104-201, § 334
1996	Asset Conservation, Lender Liability, and Deposit Insurance Protection Act	P.L. 104-208, Division A, Title II, Subtitle E
1999	Superfund Recycling Equity Act	P.L. 106-113, appendix I, title VI
2002	Small Business Liability Relief and Brownfields Reauthorization Act	P.L. 107-118

# **Superfund Program Implementation**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) contains the procedures and regulations for implementing the Superfund program.<sup>3</sup> Generally, EPA leads the response to releases on land and in inland waters, whereas the Coast Guard leads the response in coastal waters of the United States.

# **Responding to Releases**

Actions under the Superfund program are triggered by a release (or threat of release) of a hazardous substance into the environment. The CERCLA "environment" includes all media: water (surface and groundwater), soil, and air. CERCLA defines "hazardous substance" to include all the materials identified as hazardous under the Resource Conservation Recovery Act (RCRA). the Clean Water Act (CWA), the Clean Air Act (CAA), and the Toxic Substances Control Act (TSCA). CERCLA also authorizes EPA to respond to releases of "pollutants or contaminants," which are broadly defined to include virtually anything that can threaten the health of "any organism."

Petroleum is specifically excluded from the definition of hazardous substance and pollutant or contaminant. This means that neither CERCLA authority nor trust fund monies may be used to respond to releases of petroleum. However, the 2002 Brownfields law authorizes the cleanup of some petroleum-contaminated sites.

<sup>&</sup>lt;sup>3</sup> The NCP is codified at 40 CFR Part 300.

#### Site Assessment

The Superfund cleanup process starts either with a site discovery or with a notification to EPA of a potential hazardous substance release. Sites of concern can be discovered by various parties: citizens, state agencies, or EPA Regional offices. CERCLA § 103 requires release notification. Facilities must notify the National Response Center if there has been a release of a hazardous substance above a certain threshold, termed a *reportable quantity* (RQ).<sup>5</sup>

Since the inception of the Superfund program, EPA has catalogued more than 47,000 potentially contaminated sites in the agency's database: the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)<sup>6</sup>. After a site has been identified, EPA or a state agency performs a preliminary assessment to judge the site's potential hazards.<sup>7</sup> After further screening, EPA uses the Hazard Ranking System (HRS) to score the site's contamination and its risk of exposure to surrounding communities.

#### The National Priorities List

Sites that score high enough on the HRS are eligible for the National Priorities List (NPL), which is generally considered the official list of the most hazardous sites in the nation. Only a small percentage of the sites assessed are placed on the NPL. Over Superfund's history, EPA has placed 1,569 sites on the NPL (as of October 1, 2007). Of these sites, 321 have met cleanup goals and have been subsequently removed (deleted) from the NPL. At an additional 1,030 sites all physical construction activities have been performed, and operation and maintenance (such as treatment of contaminated groundwater) is ongoing. These sites are referred to as "construction complete."

The NPL has been described as the centerpiece of the Superfund program, and thus it has been a focal point for Superfund criticism. As noted in a comprehensive report prepared by Resources for the Future (RFF)<sup>9</sup> (hereafter referred to as the RFF Report):<sup>10</sup>

The expense and pace of cleaning up NPL sites has been, and continues to be, a contentious topic among followers of the Superfund program.... [E]ven though more than half of all NPL sites have been deemed "construction complete"—meaning that all physical remedies are in place and immediate risks posed by the site have been addressed—there remain hundreds of sites placed on the NPL during the early years of the program where cleanup remedies have still not been fully implemented.

Some interest groups have questioned the listing process itself and the slow pace of cleanup at NPL sites. The decision to list a site on the NPL is ultimately at EPA's discretion. <sup>11</sup> Many factors,

<sup>&</sup>lt;sup>5</sup> 40 CFR § 302.6. EPA codified the list of hazardous substances and their respective RQs in 40 CFR § 302.4. Hazardous substance RQs can range from 1 pound to 5,000 pounds.

<sup>&</sup>lt;sup>6</sup> http://www.epa.gov/superfund/sites/products/archinv.htm, visited October 3, 2007.

<sup>&</sup>lt;sup>7</sup> In practice, this activity is often carried out by a contractor.

<sup>&</sup>lt;sup>8</sup> http://www.epa.gov/superfund/sites/query/queryhtm/npltotal.htm, visited October 3, 2007.

<sup>&</sup>lt;sup>9</sup> In the FY2000 VA-HUD-Independent Agencies appropriation (P.L. 106-74) conference report, Congress directed EPA to contract with RFF to analyze the projected federal costs of the Superfund program for the period FY2000-FY2009.

<sup>&</sup>lt;sup>10</sup> Katherine Probst, et al., 2001, *Superfund's Future: What Will It Cost?*, Resources for the Future, Washington, DC, 2001, p. 31.

<sup>&</sup>lt;sup>11</sup> The process has been called "more art than science." Probst, Katherine, 2005, "Superfund at 25 - What Remains To (continued...)

other than the HRS score, influence whether a site is proposed for listing—for example, state support, <sup>12</sup> community concerns, <sup>13</sup> and Superfund budgetary issues. <sup>14</sup> EPA has stated that

The NPL is only of limited significance, however, as it does not assign liability to any party or to the owner of any specific property. Neither does placing a site on the NPL mean that any remedial or removal action necessarily need be taken. 15

There are two categories of response activity in the Superfund program: (1) short-term removal action and (2) long-term remedial action. The trust fund can support removal action at NPL or non-NPL sites. However, trust fund monies can be used for remedial activity only if the site is on the NPL.<sup>16</sup>

#### The Removal Program

The removal program grew out of the recognition that certain hazardous substance releases would necessitate a quick response. Removal action seeks to stabilize a site, and in some cases this minimizes the need for further cleanup. Removal action can be undertaken at sites regardless of their NPL status, and historically, most removal actions occur at non-NPL sites.<sup>17</sup> CERCLA limits removal action to a one-year effort and expenditures of not more than \$2 million.<sup>18</sup> This limit applies only to efforts led by EPA and funded by trust fund dollars, not at sites where the responsible party is performing cleanup.

Not all actions under the removal program are considered equally urgent. EPA groups removal actions into the following three categories:

- (1) Classic emergencies. Those actions where the release requires that on-site activities be initiated within minutes or hours of the determination that a removal action is appropriate.
- (2) Time-Critical Actions. Those actions where, based on an evaluation of the site, EPA determines that less than six months is available before site activities must be initiated.

Be Done?" Resources, Fall 2005, p. 20.

<sup>(...</sup>continued)

<sup>&</sup>lt;sup>12</sup> P.L. 104-19 (an FY1995 appropriations bill) directed EPA to obtain a letter of concurrence from the governor of a state prior to listing a site in that state on the National Priorities List. P.L. 104-134 (an FY1996 appropriations bill) provided similar direction. EPA, as a matter of policy to further enhance the role of states in the Superfund program, continues to request a governor's letter of concurrence prior to NPL listing.

 $<sup>^{13}</sup>$  An NPL designation generally carries a stigma, and local communities often worry about the effects an NPL site will have on nearby property values.

<sup>&</sup>lt;sup>14</sup> For example, EPA might be hesitant to list "mega sites" on the NPL, unless the parties responsible for the site have been identified. RFF Report, p. 89.

<sup>&</sup>lt;sup>15</sup> See, for example, U.S. EPA, "National Priorities List for Uncontrolled Hazardous Waste Sites," 70 Federal Register 54329, September 14, 2005.

<sup>&</sup>lt;sup>16</sup> 40 CFR § 300.425(b)(1).

<sup>&</sup>lt;sup>17</sup> From FY1992-FY1999, approximately 76% of removal actions occurred at non-NPL sites. RFF report, p. 16.

<sup>&</sup>lt;sup>18</sup> CERCLA § 104(c)(1). These limits can be exceeded if a waiver is obtained. EPA estimated that as of January 2001, about 8% of the removal actions conducted by EPA have exceeded \$2 million. RFF report, p.16, citing EPA analysis.

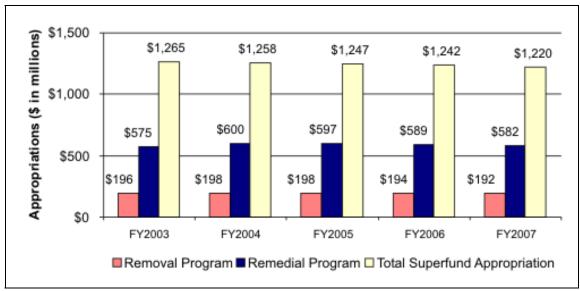
(3) Non-Time-Critical Actions. Those actions where, based on an evaluation of the site, EPA determines that more than six months is available before on-site activities must begin.<sup>19</sup>

Removal actions may include, but are not limited to:

- repairing a hazardous waste storage unit (e.g., landfill cover),
- transporting leaking drums to an appropriate disposal facility, and
- erecting a security fence to reduce opportunity of exposure.

In recent years, the removal program has consistently received about one-third of the amount appropriated to the remedial program (see **Figure 1**).

Figure 1. Removal and Remedial Program Annual Appropriations Compared With Total Superfund Annual Appropriation, FY2003-FY2007



**Sources:** Prepared by the Congressional Research Service from the following: (1) Removal and Remedial data: FY2003 and FY2004 amounts are EPA estimates provided by the Office of Congressional Affairs; FY2005 amounts are from the conference report on the Interior, Environment, and Related Agencies Appropriations Act for FY2006 (H.R. 2361, H.Rept. 109-188, p. 154); FY2006 and FY2007 amounts are from EPA's FY2007 and FY2008 budget justifications, Appendix, Program Projects Table, p. 82 and p. 78, respectively; (2) Total Appropriations data: FY2003-FY2005 are from prior year funding comparisons in committee reports on annual appropriations bills from FY2004-FY2006; FY2006 and FY2007 are from EPA's FY2007 and FY2008 budget justifications. FY2005 and FY2006 amounts include rescissions.

#### The Remedial Program

The remedial program is the core of the Superfund program. In contrast to removal actions, remedial actions, in general, take more time, cost more money, and represent a more permanent

<sup>&</sup>lt;sup>19</sup> See EPA's Response Program description at http://www.epa.gov/superfund/programs/er/hazsubs/ralts.htm.

solution. Congress consistently apportions about half of the annual Superfund appropriation to the remedial program (see **Figure 1**).<sup>2</sup>

The remedial program consists of multiple process steps, each with its own term of art. Although the remedial process does not typically follow a linear, step-by-step progression, a simplified version of events is discussed below, highlighting the main milestones.

The remedial program first involves a comprehensive investigation of the site and analysis of cleanup alternatives or remedies. This examination process (the Remedial Investigation/Feasibility Study, or RI/FS) can take months, or even years.<sup>21</sup>

Following completion of the RI/FS, EPA selects a remedy to address the site's contamination. EPA must solicit public comment when determining the remedy for the site, and states typically play an active role in the remedy selection process. CERCLA directs EPA to select a permanent remedy or treatment whenever possible. The less-preferred option is to leave the waste in place and reduce human exposure (e.g., soil cover or security fence). If the method chosen is not permanent, EPA must review the site every five years to ensure remedy protection.

After EPA decides the site-specific cleanup remedy and issues a formal Record of Decision (ROD), the remedial design (RD) phase commences. The RD is the engineering plan used to implement the remedy chosen by EPA. Development of the RD takes, on average, approximately two years. <sup>22</sup> After the RD is complete, the actual cleanup process (Remedial Action) begins. For sites where cleanup has been completed, the total process, from start (a proposed listing on the NPL) to finish (cleanup goals achieved), takes between 8 and 11 years, on average.<sup>23</sup>

### Cleanup Standards

CERCLA directs EPA to assure that Superfund site cleanups protect human health and the environment.<sup>24</sup> CERCLA specifically requires cleanups to meet "any standard, requirement, criteria, or limitation" under any federal or state environmental law. <sup>25</sup> EPA may waive this requirement if, for example, meeting the standard will not provide a balance between (1) the need for protection of health and the environment at the site and (2) the availability of monies in the trust fund for other locations.<sup>26</sup>

<sup>&</sup>lt;sup>20</sup> Other substantial accounts in the total appropriation include the removal program (\$194 million), enforcement (\$180 million), and operations and administration (\$122 million). Amounts reflect FY2006 enacted appropriation.

<sup>&</sup>lt;sup>21</sup> The RFF report (p. 48) cites EPA data from FY1993-FY1999, which indicates the average duration is 2.6 years.

<sup>&</sup>lt;sup>22</sup> The RFF report cites EPA's estimate at 1.7 years, but the report authors calculated an average RD duration of 2.25 years. RFF report at p. 210.

<sup>&</sup>lt;sup>23</sup> EPA estimates the average duration is eight years, but the RFF report finds this calculation to be inaccurate because only completed actions are included. If incomplete actions are also included, as demonstrated in the RFF report, the average duration increases to 11 years (pp. 48-52).

<sup>&</sup>lt;sup>24</sup> CERCLA § 121(d).

<sup>&</sup>lt;sup>25</sup> Id.

<sup>&</sup>lt;sup>26</sup> CERCLA provides five other conditions that allow EPA to waive the requirements. CERCLA § 121(d)(4).

## **CERCLA Liability**

CERCLA contains a liability scheme that is, by any measure, stringent. If a hazardous substance is released, or threatened to be released, from a facility, CERCLA liability may attach to a wide variety of persons. A potentially responsible party (PRP) is any individual or company that may have contributed to contamination at a Superfund site.

#### PRPs may include

- current or former owners of a facility or vessel,
- current or former operators of a facility or vessel,
- generators who sent hazardous substances to the site, and
- transporters who brought hazardous substances to the site.<sup>27</sup>

CERCLA liability is considered to be strict, joint and several, and retroactive:<sup>28</sup>

- Strict liability means that a party can be held responsible regardless of negligence. Moreover, under CERCLA, proof of causation is not necessary.
- Joint and several liability means that any liable party can be held responsible for the full cost of cleanup, regardless of the degree of involvement.
- Retroactive liability means that parties can be held responsible for actions that caused contamination prior to the passage of CERCLA.

CERCLA's liability scheme provides EPA with strong enforcement authority to require PRPs to address site contamination. The joint and several component creates an incentive for one PRP (already identified by EPA) to locate other PRPs, so that the cleanup costs can be shared.

The statute does provide several defenses, exemptions, and mechanisms for eliminating or reducing a party's CERCLA liability.<sup>29</sup> This report does not discuss these devices. For information regarding several of them, see CRS Report RL31911, "Innocent Landowners" and "Prospective Purchasers" Under the Superfund Act, by Robert Meltz.

# Natural Resource Damages<sup>30</sup>

In addition to cleanup costs, CERCLA requires PRPs to address the environmental harm they caused by restoring or replacing any injured natural resources. PRPs must also pay for the lost use of a publicly owned resource and the associated damage assessment. CERCLA designates federal, state, and tribal authorities to serve as natural resource trustees within their jurisdiction. Only the

<sup>&</sup>lt;sup>27</sup> CERCLA § 107(a).

<sup>&</sup>lt;sup>28</sup> The CERCLA statute does not include the text "strict, joint and several, and retroactive." These features of CERCLA liability derive from legislative history, case law, and the CERCLA instruction that its liability standard is the same as that in Clean Water Act § 311. See CERCLA § 101(32).

<sup>&</sup>lt;sup>29</sup> See, for example, CERCLA §§ 107(b), 107(d), 107(n), 107(o), 107(p), 107(q), 107(r).

<sup>&</sup>lt;sup>30</sup> For more background on this issue, see CRS Report RS20772, Superfund and Natural Resource Damages, by Mark Reisch.

trustees can make a natural resource damages claim under CERCLA.<sup>31</sup> In some respects, liability for natural resource damages is more narrow than the liability for cleanup costs. For example, natural resource injuries occurring wholly before the enactment of CERCLA (1980) are excluded.<sup>32</sup> Also, a claim must be brought within three years of its discovery and connection to a particular release.

## **Federal Superfund Sites**

With the passage of SARA in 1986, federal facilities became subject to CERCLA in the same fashion as non-governmental entities.<sup>33</sup> Before SARA was enacted, no federal facilities were placed on the National Priorities List (NPL). Since 1986, EPA has placed 172 federal facilities on the final NPL.<sup>34</sup> Almost all federal facilities on the NPL are defense sites, including military facilities administered by the Department of Defense (DOD) and former nuclear weapons production sites administered by the Department of Energy (DOE). These sites are among the most contaminated of those on the entire NPL.

The Superfund Trust Fund cannot be used to pay for cleanup at federal facilities. The agency responsible for the contamination is responsible for cleanup, and funding for removal or remedial action must come from that agency's budget. However, the trust fund may be used to provide alternative water supplies if groundwater contamination migrates beyond the facility boundaries and other PRPs are involved at the site.

At federal sites on the NPL, EPA oversees remedy selection and remedial action. Federal sites that do not qualify for the NPL are subject to state laws concerning removal, remedial action, and enforcement. At these sites, states oversee cleanup activity. There are almost 800 sites nationwide that fall into this category.<sup>35</sup>

# The State Role in the Superfund Process

SARA encourages state involvement at Superfund sites, and outlines minimum requirements for state participation at virtually every phase of decision-making, from site assessment to enforcement and actively managing the site cleanup. CERCLA § 104(c) requires states to pay 10% of the remedial cleanup costs, and 100% of the operation and maintenance costs beginning 10 years after construction of the remedy has been completed. However, if the facility was operated by the state (or a political subdivision thereof) at the time of disposal, the state must share 50% of the removal or remedial cleanup costs.

<sup>&</sup>lt;sup>31</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.

<sup>32</sup> CERCLA § 107(f).

<sup>&</sup>lt;sup>33</sup> CERCLA § 120.

<sup>&</sup>lt;sup>34</sup> http://www.epa.gov/superfund/sites/query/queryhtm/npltotal.htm visited May 24, 2007.

<sup>&</sup>lt;sup>35</sup> A CERCLIS search (January 18, 2007) identifies 787 federal sites not on the NPL, of which 15 were deleted from the NPL and 6 are proposed to be on the NPL.

This cost-sharing component may play a role in whether sites are listed on the NPL. Although not currently required by law, EPA typically does not propose new sites to the NPL without a state's agreement.<sup>36</sup> For budgetary reasons, states may be hesitant to add Fund-led sites to the NPL.

Most Superfund sites are not on the NPL. Of the roughly 10,000 sites currently in the CERCLIS database, about 90% are not on the NPL. At these non-NPL sites, the federal role may include cleanup assessment or removal activity, or the federal government may have no presence at all. State cleanup programs have the authority to assess and clean up non-NPL sites and to identify other potential hazardous sites. The majority of the state cleanup programs have authorities similar to the federal Superfund program.<sup>37</sup>

# **Selected Superfund Issues**

This section of the report discusses four Superfund issues that have received interest in recent years. The first two issues concern program funding, including who should fund the program (industry or general taxpayers) and how much funding is needed to meet the program's obligations. The second two issues concern CERCLA interaction at specific site types: abandoned hardrock mines and animal feeding operations.

## Superfund Trust Fund and Taxes<sup>38</sup>

In February 2002, controversy erupted over the Bush Administration's proposal not to request renewal of the Superfund taxes in its FY2003 budget submission<sup>39</sup>—a decision repeated in its submissions for FY2004 through FY2008. Congress has concurred with the Administration's position and chosen not to renew the Superfund taxes.

The tax authority expired in 1995, but the fund's balance remained positive until FY2003. Without dedicated taxes, and with a relatively small balance in the trust fund, Congress has been using general revenues for a larger percentage of cleanup funds. Although several Members of Congress have introduced bills to reinstate the taxes during these years, such efforts have lacked the necessary support.

CERCLA established the Superfund program and its trust fund in 1980. Although General Treasury revenues have provided some support for the program since its inception, <sup>40</sup> the trust fund traditionally provided most of the funding for the Superfund program. Congress raised trust fund revenues primarily through excise taxes on the petroleum and chemical industries, and a

<sup>&</sup>lt;sup>36</sup> P.L. 104-19 (an FY1995 appropriations bill) directed EPA to obtain a letter of concurrence from the governor of a state prior to listing a site in that state on the National Priorities List. P.L. 104-134 (an FY1996 appropriations bill) provided similar direction. EPA, as a matter of policy to further enhance the role of states in the Superfund program, continues to request a governor's letter of concurrence prior to NPL listing.

<sup>&</sup>lt;sup>37</sup> Environmental Law Institute, 2002, An Analysis of State Superfund Programs: 50-State Study, 2001 Update, p. 13.

<sup>&</sup>lt;sup>38</sup> For a more comprehensive discussion, see CRS Report RL31410, *Superfund Taxes or General Revenues: Future Funding Issues for the Superfund Program*, by Jonathan L. Ramseur, Mark Reisch, and James E. McCarthy.

<sup>&</sup>lt;sup>39</sup> The Administration had not requested renewal of the taxes in its FY2002 budget submission either, but the issue did not become particularly contentious, in part, perhaps, because the fund had a larger balance at the time.

<sup>&</sup>lt;sup>40</sup> From FY1991-FY1995—the five year period prior to the expiration of the Superfund taxes—General Treasury revenues contributed approximately 17% of the total revenues supporting the Superfund Trust Fund.

corporate environmental income tax. These dedicated taxes sustained the trust fund until the taxing authority expired December 31, 1995. Since 1995, efforts to reinstate the taxes have not succeeded.

At the end of FY1996, the trust fund reached a peak balance of \$3.8 billion (see **Figure 2**). Without a consistent source of funding, the balance dwindled essentially to zero by the end of FY2003. The annual budgets have compensated for the lack of dedicated tax revenue by increasing the contribution from the general fund of the U.S. Treasury. In fiscal years 2004-2007, virtually the entire Superfund program was funded through General Treasury revenues appropriated by Congress. The FY2008 budget request followed this course, proposing to fund the vast majority of the \$1.24 billion requested appropriation from General Treasury revenues.

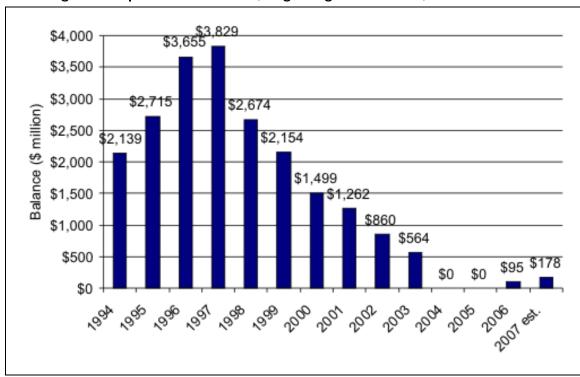


Figure 2. Superfund Trust Fund, Beginning Year Balance, FY1994-FY2007

**Source:** Prepared by the Congressional Research Service, with information provided by OMB Budget of the United States Government, Appendix, Fiscal Years 1996-2008.

In a majority of cases, Superfund cleanups are paid for by potentially responsible parties (PRPs)—usually current or previous owners and/or operators of the site. According to EPA, PRPs conduct cleanup at more than 70% of the sites on the NPL. 42 At approximately 30% of the NPL sites, either EPA cannot locate PRPs for these properties or the PRPs located do not have the necessary financial resources to assist with cleanup. It is primarily for this group of NPL sites

<sup>&</sup>lt;sup>41</sup> The trust fund received (and continues to receive) income from interest earned, cost recoveries, and fines and penalties, but these sources are minor compared with the previous tax revenues.

<sup>&</sup>lt;sup>42</sup> At many sites, EPA cannot immediately locate a financially viable PRP, or there are disputes among the PRPs concerning their degree of responsibility. In such cases, the statute permits EPA to proceed with cleanup using the trust fund's resources, to locate PRPs after or during cleanup, and to recover the cleanup costs from PRPs at a later date.

(often called "orphan" sites) that EPA uses funds from the trust fund to conduct cleanup activities. In general, the current Superfund funding debate (i.e., whether a dedicated tax or General Treasury revenues should support the trust fund) applies to this subset of NPL sites.<sup>43</sup>

Proponents of reinstating the Superfund taxes argue that the cleanup of orphan sites should rely on taxes paid by the chemical and petroleum industries and companies that use CERCLA hazardous substances, not ordinary taxpayers. They refer to this as the "polluter pays" principle. When Bush Administration spokespersons indicate support for the "polluter pays" concept, they generally mean that cleanup should be funded by the parties directly involved (i.e., PRPs) rather than by industrial sectors or corporations that did not directly contribute to a specific site's contamination. Opponents of reinstating the tax argue, for example, that the tax is overreaching and unfair, as it applies to all industry sectors and to both compliant and noncompliant companies. Superfund tax proponents contend that in the context of federal budget deficits, it may be difficult to maintain spending at needed levels without dedicated taxes.

Amendments to CERCLA have addressed some of the claims of unfairness. The Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996 (P.L. 104-208) limited banks' and other lenders' exposure to Superfund liability at a contaminated site to the amount of their loans. Businesses engaged in recycling were absolved of liability if they met certain criteria showing that their activities were genuine recycling, and not shams to disguise illegal disposal of hazardous substances (Superfund Recycling Equity Act, P.L. 106-113). Additional limits on CERCLA liability were provided in the Small Business Liability Relief and Brownfields Revitalization Act (P.L. 107-118), which made contributors of small amounts of hazardous substances at an NPL site exempt from liability if the wastes were disposed prior to April 1, 2001. Also exempted were residential property owners, small businesses, and small nonprofit organizations that sent only municipal solid waste to NPL sites, as well as property owners whose land abuts a Superfund site, prospective purchasers of contaminated property, and innocent landowners.

Since the 107<sup>th</sup> Congress, legislation has been introduced that would reinstate the Superfund taxes, but these efforts have failed. In the 110<sup>th</sup> Congress, several members, including Senate Environment and Public Works Committee Chairman Barbara Boxer and Subcommittee on Superfund and Environmental Health Chair Hillary Clinton, have spoken in favor of restoring the taxes. Representative Maurice Hinchey (H.R. 1887) and Senator Robert Casey (S. 1179) introduced companion bills that would reinstate the taxes, and for the first five years would increase them by 50% to fund a response at "megasites" (where cleanup costs exceed \$50 million) and at sites that present high health risks. Representatives Earl Blumenauer and Frank Pallone introduced H.R. 3636, which would reimpose the taxes beginning with the date of enactment until January 1, 2018. Representative Pallone's H.R. 3962 would restore the taxes at their previous rates through the end of 2015.

<sup>&</sup>lt;sup>43</sup> Although 70% of the NPL cleanups are performed by PRPs, the RFF report (chapter 5) finds there may be many orphan sites eligible for the NPL (i.e., have a high enough HRS score) that remain unlisted for various reasons (discussed in the NPL subsection above). Thus, one might argue that the 70%-30% ratio understates the universe of orphan sites that need federal funding for cleanup.

# Superfund Program Funding Needs and Appropriation Levels

Related to the Superfund program funding debate is the concern that the Superfund program is not receiving enough funding to match its annual obligations. Recent evidence indicates that appropriations from the past several years have fallen short of program needs. If Congress decides to increase annual appropriations without reinstating the Superfund taxes, General Treasury revenues contribution to the program will increase, possibly conflicting with deficit reduction goals.

As noted above, in July 2001, Resources for the Future (RFF) released a comprehensive study, mandated by Congress, 44 that estimated future program needs for fiscal years 2000-2009. RFF calculated that the base case program needs for FY2008 would be \$1.7 billion. The report also estimated a high and low case: \$1.5 billion and \$1.8 billion per year, respectively. RFF concluded that funding needs would remain above \$1.6 billion annually through FY2009 (using RFF's base case). As **Figure 3** indicates, annual Superfund appropriations in recent years have consistently been several hundred million dollars less than the funding needs projected by RFF.

Several factors contributed to RFF's projections for increased funding needs. First, RFF anticipated that numerous "mega sites" would move beyond the analysis and design phases and into the actual construction and cleanup phases. 45 In the RFF analysis, the cost of remedial action at mega sites was projected to remain above historic levels through FY2007, and the cost of the Superfund program as a whole was projected to remain above FY2001 levels through at least FY2009 (the final year in the analysis).<sup>46</sup>

Second, EPA's Office of Inspector General (IG) highlighted the concern that hardrock mining sites may have a significant financial impact on the trust fund. The IG identified "156 hardrock mining sites nationwide that have the potential to cost between \$7 billion and \$24 billion to clean up." Although the IG points out uncertainty regarding the risks to human health and the environment at these sites. 47 there is also uncertainty concerning PRPs and their ability to pay for cleanup.48

<sup>&</sup>lt;sup>44</sup> In the FY2000 VA-HUD-Independent Agencies appropriation (P.L. 106-74) conference report, Congress directed EPA to contract with RFF to analyze the projected federal costs of the Superfund program for the period FY2000-FY2009.

<sup>&</sup>lt;sup>45</sup> "Mega sites" are sites at which the projected cleanup cost is \$50 million or more. The average cost at mega sites is projected to be \$140 million. RFF Report, p. 87.

<sup>&</sup>lt;sup>46</sup> RFF Report, pp. 127, 266.

<sup>&</sup>lt;sup>47</sup> This factor is important because sites must be on the NPL to qualify for long-term cleanup (remedial) assistance from the trust fund.

<sup>&</sup>lt;sup>48</sup> EPA Office of Inspector General, Annual Superfund Report to Congress for Fiscal Year 2004, EPA-350-R-05-001, August 2005, p. 3.

2.000 1,854 1.763 1,748 1,800 1.615 1.600 1,311 270 1.400 1,258 1,265 1,245 .220 1,200 \$ million 1.000 800 600 400 200 0 2001 2002 2003 2004 2005 2006 2007 2008 2009 ■ Need Projected RFF ■ Appropriated : Requested

Figure 3. Superfund Appropriations: FY2001-FY2007 Enacted and FY2008 Requested Versus Resources for the Future Projections of Funding Needs

(amounts in millions prior to transfers)

**Sources:** Prepared by the Congressional Research Service using the following sources: FY2001-FY2005 enacted amounts are from prior year funding comparisons in committee reports on annual appropriations bills from FY2002-FY2006; FY2006 and FY2007 enacted (FY2007 is from continuing resolutions), and FY2008 requested amounts are from EPA's FY2007 and FY2008 budget justifications; projected funding levels are from the Resources for the Future report, Superfund's Future: What Will It Cost?

There is evidence that funding shortfalls have occurred in recent years. According to an EPA IG report, in FY2002, the EPA regional offices received no funds for seven of the sites at which the regions requested construction funding. At five different sites, the Regions received less than half of the total funds requested.<sup>49</sup> In FY2003, the IG identified an additional 11 sites that could not begin construction because of a funding shortfall, and at least 5 other sites that did not receive their full funding request in that year.<sup>50</sup> Although the IG did not report on the subject in FY2004, a survey of EPA staff by the House Energy and Commerce Committee Democratic staff found a reported shortfall of \$263.1 million.<sup>51</sup> EPA challenged some of the committee data but confirmed

<sup>&</sup>lt;sup>49</sup> Letter of October 25, 2002, from Nikki L. Tinsley, EPA Inspector General, to Senator James Jeffords, Chairman, Committee on Environment and Public Works, and Senator Barbara Boxer, Chair, Superfund, Toxics, Risk, and Waste Management Subcommittee, pp. 1-3.

<sup>&</sup>lt;sup>50</sup> U.S. EPA, Office of Inspector General, *Congressional Request on Funding Needs for Non-Federal Superfund Sites*, Report 2004-P-00001, January 7, 2004, pp. 4, 8-9.

<sup>&</sup>lt;sup>51</sup> Letter from Representative John Dingell, Ranking Member of the House Committee on Energy and Commerce, to Mike Leavitt, EPA Administrator, August 13, 2004.

in letters to House and Senate Democrats that, due to lack of funding, it did not start construction at 19 sites that were ready for construction in FY2004.<sup>52</sup>

Congress could increase appropriation levels to meet the increased funding needs. The Administration notes that it requested increases in funding in both its FY2004 request for \$1.39 billion and its FY2005 request for \$1.38 billion, which Congress did not provide. Congress cut the FY2004 and FY2005 requests by \$132 million and \$134 million, respectively. Although the Administration's request in FY2006 (\$1.28 billion) was lower compared with previous years, Congress cut the proposal by \$40 million, enacting \$1.24 billion. The Administration requested \$1.26 billion for FY2007, a \$20 million decrease from its previous request, but \$20 million above the amount enacted by Congress in FY2006 (See **Figure 4**). The 109<sup>th</sup> Congress adjourned without finalizing FY2007 appropriations for EPA, but it enacted a continuing resolution (P.L. 109-383, H.J.Res. 102) to provide funding through February 15, 2007. Pursuant to the formula provided in the continuing resolution, the Superfund program will continue to receive funding consistent with the FY2006 enacted appropriation. For FY2008 the Administration has requested \$1.24 billion.

Given RFF's projected funding needs for the Superfund program and the relatively minimal amounts available to the fund from sources other than general revenues, Congress will face competing interests if it attempts to appropriate all of Superfund's needs. RFF estimates that General Treasury revenue contributions as high as \$1.5 billion per year would be needed to finance Superfund through the rest of the decade in the continued absence of Superfund taxes. This could prove difficult in light of current federal deficits and other funding priorities.

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<sup>&</sup>lt;sup>52</sup> See Letter from Mike Leavitt, EPA Administrator to Representative John Dingell, Ranking Member of the House Committee on Energy and Commerce, October 14, 2004. See also "FY04 Cleanup Delays Renew Democrats' Criticism of Superfund Budget," *Inside EPA Superfund Report*, October 25, 2004. The data in the article were confirmed by EPA in a personal communication March 3, 2005.

<sup>&</sup>lt;sup>53</sup> The funding formula sets continuing appropriations for programs and activities generally at either the current (FY2006) level, the level in the pertinent House-passed bill, or the level in the Senate-passed bill, whichever is lowest. On May 18, 2006, the House passed the FY2007 Interior, Environment, and Related Agencies appropriations bill (H.R. 5386, H.Rept. 109-465) providing a total of \$1.26 billion for EPA's Superfund account (prior to transfers to other accounts). This is \$14.8 million more than the FY2006 enacted amount. The Senate did not pass a bill, thus under the continuing resolution, funding will continue at FY2006 levels.

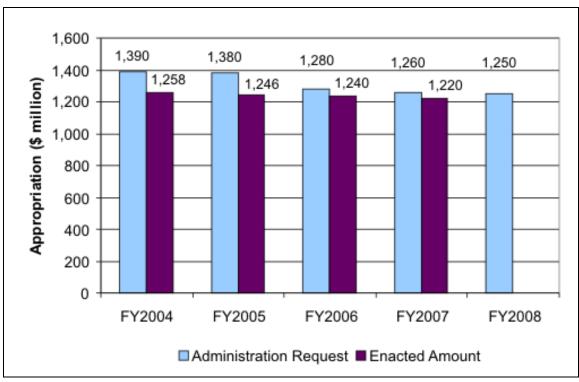


Figure 4. Administration Budget Request Versus Enacted Superfund Appropriation, FY2004-FY2008

Sources: Prepared by the Congressional Research Service using data from the following sources: FY2004-FY2005 enacted amounts and FY2004-FY2006 requested amounts are from prior year funding comparisons in committee reports on annual appropriations bills from FY2004-FY2006; FY2006 enacted amount and FY2007 and FY2008 amounts are from EPA's FY2007 and FY2008 budget justifications.

#### Abandoned Hardrock Mines

Although CERCLA liability is a powerful tool for EPA to drive cleanup of contaminated sites, the threat of CERCLA liability may act as a cleanup disincentive at abandoned hardrock mines. There are thousands of inactive or abandoned hardrock mines in the United States. As discussed previously, the number of hardrock mining sites listed on the NPL in future years, particularly those without identifiable PRPs, could play an important role in the Superfund funding debate. This section examines the interaction between CERCLA and contaminated hardrock mines.

#### **Background**

Hardrock mining involves the extraction of metals found in the earth's hard formations.<sup>54</sup> Although the raw materials generated are essential to the U.S. economy, the hardrock mining process creates vast quantities of waste materials.<sup>55</sup> EPA's Toxic Release Inventory (TRI) data

<sup>&</sup>lt;sup>54</sup> Hardrock mining includes gold, silver, copper, and other metals, but not coal.

<sup>&</sup>lt;sup>55</sup> For example, in 1992, gold and copper mining in the United States generated 1.2 billion metric tons of waste materials. In contrast, approximately 200 million metric tons of municipal solid waste are produced annually. U.S. EPA, 1997, National Hardrock Mining Framework, Appendix A, at A-1, at http://www.epa.gov/superfund/programs/ aml/policy/hardrock.pdf.

show that the metal mining industry consistently leads other industry sectors in total annual releases of TRI chemicals.<sup>56</sup>

Hardrock mining played a central role in the development of the American West. However, as mining sites became uneconomical, mines were closed or the owners simply walked away. The precise number of inactive or abandoned mines is unknown. Though arguably a conservative estimate, EPA states that there are 200,000 inactive or abandoned mines throughout the country. The actual number of sites that pose a threat is also unknown. Estimates vary, and they seem to depend on how a threat is classified. For example, the Western Governors Association estimated that approximately 20% of abandoned mine lands (AMLs) may present a "concern" to water quality, public safety, or both. In its 1997 report, EPA found that only a small percentage of AMLs "contribute significantly" to threats to human health or the environment, but the aggregate impact is substantial, with many localized areas suffering serious environmental impacts. In 2002, an EPA team found that 5%-10% of the abandoned mines across the country may pose a "real environmental and health risk."

#### Mining Sites and the National Priorities List

CERCLA provides EPA with the authority to address environmental contamination (e.g., acid mine drainage) at AMLs.<sup>62</sup> Pursuant to CERCLA authority, EPA has completed or overseen removal actions at 74 hardrock mining sites.<sup>63</sup> EPA has listed at least 88 hardrock mining sites on the NPL.<sup>64</sup> At least 17 of these mines are considered mega sites, with cleanup costs over \$50 million at each site.

Considering the large universe of AMLs, one might question why such a small percentage of the sites are listed on the NPL. There are several factors, particular to the mining industry, that may explain this. First, AML ownership often goes back more than 100 years and involves numerous private and public entities. Thus, the identification of PRPs is especially complex at mining

<sup>&</sup>lt;sup>56</sup> See TRI Public Data Releases at http://www.epa.gov/tri/tridata/index.htm.

<sup>&</sup>lt;sup>57</sup> For more information on inventory efforts, see, for example., GAO, 1996, *Federal Land Management: Information on Efforts to Inventory Abandoned Hardrock Mines*, GAO/RCED-96-30, available at http://www.gao.gov/archive/1996/rc96030.pdf.

<sup>&</sup>lt;sup>58</sup> The Mineral Policy Center places the number at approximately 500,000 (see http://www.mineralpolicy.org/ AbandonedMineLegacy.cfm). Though it is often quoted, the 1996 GAO report and others find fault with the Mineral Policy Center's estimate.

<sup>&</sup>lt;sup>59</sup> U.S. EPA, 1997, *National Hardrock Mining Framework*, p. 2, at http://www.epa.gov/superfund/programs/aml/policy/hardrock.pdf; U.S. EPA Office of Inspector General, 2004, *Nationwide Identification of Hardrock Mining Sites*, Report No. 2004-P-00005, p. 4.

<sup>&</sup>lt;sup>60</sup> Most groups use the phrase "abandoned mine lands" (AMLs), but several sources describe the sites as "inactive or abandoned mines" (IAMs). In general, these terms seem to be interchangeable, though AMLs include land that is contiguous to the mine proper.

<sup>&</sup>lt;sup>61</sup> Western Governors Association, 1998, *Cleaning Up Abandoned Mines: A Western Partnership*, p. 5, available at http://www.westgov.org/wga/publicat/miningre.pdf.

<sup>&</sup>lt;sup>62</sup> CERCLA § 104 (Response Authorities).

<sup>&</sup>lt;sup>63</sup> See EPA's abandoned mine lands CERCLIS inventory at http://www.epa.gov/superfund/programs/aml/amlsite/removal.htm.

<sup>&</sup>lt;sup>64</sup> For EPA's list of AMLs on the NPL (as of April 2005), see http://www.epa.gov/superfund/programs/aml/amlsite/npl.htm.

sites. Second, the average cleanup cost—about \$22 million—at a non-mega mining site is more than double the average cost of non-mega sites in other industries. Cleanup activities at mega mining sites can cost hundreds of millions of dollars. Third, states may provide some resistance to Fund-led (i.e., sites without PRPs) cleanup at mining sites, because the Superfund statute requires the state to pay 10% of the remedial costs and 100% of operation and maintenance costs. At mining sites, these costs could be significant and last for an indefinite period of time.

On the other hand, several factors may lead EPA and the states to increase the number of AMLs on the NPL. For instance, growing populations in the West, due either to business development or purchases of second homes, may bolster the pressure to remove contamination from local water sources. Moreover, CWA requirements may provide further pressure to address the pollution from AMLs. Section 303(d) of the Clean Water Act requires states to identify pollutant-impaired water segments and develop "total maximum daily loads" (TMDLs) that set the maximum amount of pollution that a water body can receive without violating water quality standards.<sup>68</sup>

#### **Federal Land Issues**

As with the total number of inactive or abandoned mines, the precise number of these mines on federal lands is unknown.<sup>69</sup> The federal government owns a substantial percentage of the land in the western states,<sup>70</sup> and many of the AMLs are on federal land. CERCLA prohibits the use of trust fund dollars at federally owned facilities.<sup>71</sup> Federal land managers may need to clean up the site with funds from their own budget, if the federal government is considered the owner of the abandoned mine.

#### **Good Samaritan Issues**

The term "good samaritan" refers to parties (e.g., government agencies, nonprofits, and corporations) that attempt to clean up abandoned mines for which the parties have no legal responsibility. In most cases, these parties have a vested interest in cleaning up the contaminated mines and are not acting purely for altruistic reasons, as the term "good samaritan" might imply. Some stakeholders believe that the threat of CERCLA liability 22 serves as a disincentive to good

<sup>&</sup>lt;sup>65</sup> At the start of EPA's enforcement-first policy in FY1991 through FY1998, only 33% of remedial action at mining sites was performed by PRPs. In contrast, the same measurement at other site types (chemical manufacturing, oil refining, etc.) was generally doubled, ranging from 56% to 89%. Probst, p. 216.

<sup>66</sup> CERCLA § 104(c)(3).

<sup>&</sup>lt;sup>67</sup> RFF Report, p. 92.

<sup>&</sup>lt;sup>68</sup> For more information on the TMDL program, see CRS Report 97-831, *Clean Water Act and Total Maximum Daily Loads (TMDLs) of Pollutants*, by Claudia Copeland.

<sup>&</sup>lt;sup>69</sup> For various agency efforts on this calculation, see GAO, 1996, Federal Land Management: Information on Efforts to Inventory Abandoned Hardrock Mines, GAO/RCED-96-30.

<sup>&</sup>lt;sup>70</sup> The Bureau of Land Management and the Forest Service own almost 40% of the land in the 12 western states. National Research Council, 1999, *Hardrock Mining on Federal Lands*, p. 19.

<sup>&</sup>lt;sup>71</sup> CERCLA § 111(e)(3).

CERCLA § 111(e)(3).

<sup>&</sup>lt;sup>72</sup> CWA liability is also a concern for Good samaritans. For more information regarding the CWA, see CRS Report RL30030, *Clean Water Act: A Summary of the Law*, by Claudia Copeland. For a discussion regarding CWA liability at abandoned mines, see, for example, McAllister, Sean, 2003, "Unnecessarily Hesitant Good Samaritans: Conducting Voluntary Cleanups of Inactive and Abandoned Mines Without Incurring Liability," 33 *Environmental Law Reporter* 10245, at http://www.restorationtrust.org/goodsam.pdf (hereafter "McAllister, 2003").

samaritan groups who might offer cleanup assistance. Under CERCLA's joint and several liability, EPA can hold one PRP responsible for the entire site cleanup. Under the statute's broad liability structure, good samaritans could potentially become liable as site owners, operators, or as persons who arrange for the disposal of a hazardous substance.<sup>73</sup> For example, good samaritans who conduct remediation activities, such as the treatment of acid mine drainage, might be considered a site operator. Many groups argue<sup>74</sup> that the threat of CERCLA liability creates a chilling effect, discouraging volunteer cleanup at abandoned mining sites. These parties have called for federal legislation that would provide good samaritans with protection from Superfund's liability scheme.

In general, most parties support the concept of encouraging good samaritan assistance at AMLs. However, some environmental groups are concerned about providing exemptions from CERCLA's liability, pointing out that the strong liability provisions often drive cleanup at mining sites. <sup>75</sup> Furthermore, some argue<sup>76</sup> that the Superfund statute already provides liability protection for good samaritans. CERCLA § 107(d) (often referred to as the "good samaritan provision")<sup>77</sup> might allow good samaritans to provide cleanup assistance at the direction of EPA, without the threat of liability.

The Small Business Liability Relief and Brownfields Revitalization Act of 2002 (P.L. 107-118), which amended portions of Superfund, added the "bona fide prospective purchaser" (BFPP) exemption. This provision allows parties to purchase contaminated property without accepting the liability for historical contamination, notwithstanding that they knew of the contamination when they purchased. The BFPP exemption is conditional. For example, BFPPs must take "reasonable steps" to (1) stop continuing releases, (2) prevent threatened future releases, and (3) prevent or limit human, environmental, or natural resource exposure to *earlier* hazardous substance releases. Thus, BFPPs may need to address the releases related to the actions of former owner/operators. Regarding this issue, EPA stated:

Congress did <u>not</u> intend to create, as a general matter, the same types of response obligations that exist for a CERCLA liable party (e.g., removal of contaminated soil, extraction and treatment of contaminated groundwater).... Nevertheless, it seems clear that Congress also did not intend to allow a landowner to ignore the potential dangers associated with hazardous substances on its property. [Emphasis in original.]<sup>81</sup>

<sup>&</sup>lt;sup>73</sup> CERCLA § 107(a). See also Testimony of Assistant Administrator for Water, U.S. EPA, Benjamin Grumbles, in U.S. Congress, House Subcommittee on Water Resources and the Environment, 109<sup>th</sup> Cong., 2<sup>nd</sup> sess., March 30, 2006.

<sup>&</sup>lt;sup>74</sup> See, for example, Testimony of Administrator of Colorado Water Quality Control Commission, Paul Frohardt, in U.S. Congress, House Subcommittee on Water Resources and the Environment, 109<sup>th</sup> Cong., 2<sup>nd</sup> sess., March 30, 2006.

<sup>&</sup>lt;sup>75</sup> See, for example., Testimony of Velma Smith, Senior Policy Associate with the National Environmental Trust, in U.S. Congress, House Subcommittee on Water Resources and the Environment, 109<sup>th</sup> Cong., 2<sup>nd</sup> sess., March 30, 2006.

<sup>&</sup>lt;sup>76</sup> See, for example, McAllister, 2003, 10245; Kodish, Jeffrey, 2002, *Addendum: Restoring Inactive and Abandoned Mine Sites: A Guide to Managing Environmental Liabilities*, at http://www.restorationtrust.org/legalguides.htm.

<sup>&</sup>lt;sup>77</sup> See, for example, Kodish, Jeffrey, 2002, *Restoring Inactive and Abandoned Mine Sites: A Guide to Managing Environmental Liabilities*, p. 115, at http://www.restorationtrust.org/legalguides.htm., and McAllister, 2003, p. 10256.

<sup>&</sup>lt;sup>78</sup> CERCLA §§ 101(40), 107(r).

<sup>&</sup>lt;sup>79</sup> For a more legal analysis of the BFPP provision and other liability defenses, see CRS Report RL31911, "*Innocent Landowners*" and "*Prospective Purchasers*" *Under the Superfund Act*, by Robert Meltz.

<sup>&</sup>lt;sup>80</sup> CERCLA § 101(40)(D).

<sup>&</sup>lt;sup>81</sup> Memorandum from Susan Bromm, Director of EPA's Office of Site Remediation and Enforcement, to Regional Directors, "Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective (continued...)

Regardless of the opportunities for avoiding liability, interested parties argue that the threat of Superfund liability remains. In a general sense, good samaritans may be uncertain how EPA would apply the BFPP provisions at a particular mining site.<sup>82</sup> This uncertainty is perhaps amplified due to the possibility of citizen suits, which may occur if environmental or community groups disagree with an agency's interpretation or application of the law.<sup>83</sup>

#### Legislation

Four good samaritan bills were introduced in the 109<sup>th</sup> Congress. None of the bills received committee action, although the House Transportation and Infrastructure, Water Resources and Environment Subcommittee held an oversight hearing on hardrock mine cleanup and good samaritans on March 30, 2006. No bills have been introduced in the 110<sup>th</sup> Congress. For more information, see CRS Report RL33575, *Cleanup at Abandoned Hardrock Mines: Issues Raised by "Good Samaritan" Legislation in the 109<sup>th</sup> Congress*, by Claudia Copeland and Robert Meltz.

## Releases from Animal Feeding Operations<sup>84</sup>

In the United States, there are approximately 238,000 animal feeding operations (AFO)—agriculture enterprises where animals are kept and raised in confinement. Animal waste from these operations generates several chemicals (e.g., ammonia, hydrogen sulfide, and phosphorous) that are listed as CERCLA hazardous substances. CERCLA requires facilities to report hazardous substance releases into the environment, including ambient air, that are above reportable quantities (RQ). The RQ for hydrogen sulfide and ammonia is 100 pounds per day; the RQ for phosphorous is 1 pound per day. For phosphorous is 1 pound per day.

In recent years, there have been questions as to how CERCLA applies to animal feeding operations. For example, are AFOs required to report ammonia air emissions as releases under CERCLA, and if so, how should the releases be counted in regards to the RQ? Several federal courts have addressed this particular issue by examining the CERCLA definition of "facility." Instead of counting each barn, lagoon, or land application area as separate facilities, these courts have ruled that the entire site should be considered a facility for purposes of CERCLA. Under this interpretation, large AFOs (referred to as *concentrated animal feeding operations*, or CAFOs) will be more likely to breach the reportable quantity levels because multiple release locations at a given site will be aggregated.

Purchaser, Contiguous Property, or Innocent Landowner Limitations on CERCLA Liability ("Comment Elements")," March 6, 2003, p. 9.

<sup>84</sup> For further discussion, see CRS Report RL33691, *Animal Waste and Hazardous Substances: Current Laws and Legislative Issues*, by Claudia Copeland.

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<sup>(...</sup>continued)

<sup>&</sup>lt;sup>82</sup> For example, what are "reasonable steps" under the BFPP exemption?

<sup>83</sup> CERCLA § 310.

<sup>&</sup>lt;sup>85</sup> The Emergency Planning and Community Right to Know Act (EPCRA, P.L. 99-499, USC §§ 11001-11050) also contains reporting provisions. Facilities must report to state and local officials any releases greater than the reportable quantity of a CERCLA hazardous substance or an "extremely hazardous substance" under EPCRA.

<sup>&</sup>lt;sup>86</sup> 40 CFR § 302.4

<sup>&</sup>lt;sup>87</sup> See Sierra Club v. Seaboard Farms, 387 F.3d 1167 (10<sup>th</sup> Cir. 2004); Sierra Club v. Tyson Foods, 299 F. Supp. 2d 693, (W.D. Ky. 2003).

At a hearing before the House Appropriations Subcommittee on Interior, Environment, and Related Agencies on February 28, 2007, EPA Administrator Stephen Johnson testified that the Agency was developing a regulation to exempt CAFOs from Superfund mandates to report air emissions. He said this would be a "very narrow regulation."

Another question concerns CERCLA liability for manure that reaches water bodies (via erosion or leaching into groundwater). <sup>89</sup> Manure is often applied to the land as fertilizer, but CERCLA excludes the "normal application of fertilizer" from the definition of release. <sup>90</sup> Interested parties have argued that some AFOs are taking advantage of this exclusion by applying more manure to the land than is necessary. In the past three years, two federal district courts have looked into this matter, but both cases were settled. The terms of the settlements were not made public, and the settlements effectively ended the court proceedings without a formal ruling on the CERCLA applicability issues. <sup>91</sup> However, a third case <sup>92</sup> involving this issue is currently in the federal system.

This court activity has increased concern in the agricultural community that other legal actions will follow, and that the courts will continue to apply CERCLA to AFOs. This concern has led to recent congressional interest. Members in the 109<sup>th</sup> Congress made several attempts to exempt manure from the requirements of CERCLA. Although one of these legislative proposals (H.R. 4341) gained considerable support (191 co-sponsors), the proposals also generated opposition from environmental groups and state and local governments. None of the bills were enacted. In the 110<sup>th</sup> Congress, H.R. 1398 and S. 807 follow a similar approach. There has been no action on either bill. Senator Blanche Lincoln submitted Senate Amendment 1556 to the energy bill, H.R. 6, on June 13, 2007; it would have added an exemption for manure from the definitions of "hazardous substance" and "pollutant or contaminant," and would have provided exceptions from other provisions of CERCLA. However, during debate the amendment was not offered. H.R. 6 passed the Senate on June 21, 2007.

# **Conclusion**

Superfund issues, such as the four described above, continue to generate debate and interest. The selected topics discussed in this report are not mutually exclusive; activity in one of the issues may influence policy in another. For example, if more abandoned hardrock mining sites are added to the NPL, Congress may consider increasing annual appropriations to the Superfund program. This action could affect the argument concerning who should pay for the program. Similarly, CERCLA's level of application to animal feeding operations could affect the use of agency

91 See City of Waco v. Schouten, W.D. Tex., No. W-04-CA-118 (settled January 17, 2006); City of Tulsa v. Tyson

<sup>&</sup>lt;sup>88</sup> "EPA Plans Exemption for CAFO Emissions from Superfund Reporting," *Inside EPA.com*, February 28, 2007. As of October 21, 2007, the regulation had not been proposed.

<sup>&</sup>lt;sup>89</sup> Data collected for the EPA's 2000 National Water Quality Inventory identify agriculture as the leading contributor to water quality impairments in rivers and lakes and the fifth leading contributor to impairments in the nation's estuaries. Animal feeding operations are only a subset of the agriculture category, but 29 states specifically identified animal feeding operations as contributing to water quality impairment.

<sup>&</sup>lt;sup>90</sup> CERCLA § 101(22).

Foods, Inc., N.D. Okla., No. 01-CV-0900-EA (settled July 16, 2003).

92 Oklahoma v. Tyson Foods, Inc., N.D. Okla., 4:05-CV-329 (filed June 13, 2005). The case is expected to come to trial

<sup>&</sup>lt;sup>22</sup> Oklahoma v. Tyson Foods, Inc., N.D. Okla., 4:05-CV-329 (filed June 13, 2005). The case is expected to come to trial in 2009, according to the Oklahoma Attorney General's office. "Oklahoma AG's Vow Fails to Limit Industry Fears Over CAFO Waste Suit," Water Policy Report, September 17, 2007, viewed at InsideEPA.com, October 22, 2007.

resources in the future. If more sites fall under the CERCLA umbrella, finite agency resources may be strained, thus further fueling a debate over Superfund taxes and funding levels.

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