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United States Government Accountability Office
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September 16, 2005

The Honorable James M. Inhofe
Chairman, Committee on Environment and
Public Works
United States Senate

Subject: *Environmental Cleanup: Transfer of Contaminated Federal Property and Recovery of Cleanup Costs*

Dear Mr. Chairman:

Ammonium perchlorate (perchlorate) is a primary ingredient in solid rocket propellant and has been used for decades by the Department of Defense (DOD), the National Aeronautics and Space Administration, and the defense industry in the manufacturing, testing, and firing of rockets and missiles. Perchlorate has been found in the drinking water, groundwater, surface water, or soil in 35 states, the District of Columbia, and 2 commonwealths of the United States. Exposure to perchlorate affects the human thyroid, and certain levels of exposure may result in hyperthyroidism in adults and developmental delays in children. Although there is no specific federal requirement to clean up perchlorate, the Environmental Protection Agency (EPA) and state regulatory agencies have used various environmental laws and regulations to require cleanup of perchlorate by responsible parties.

Between 1942 and 1945, new military uses for perchlorate led to an increase in the production of perchlorate in the United States. Between 1945 and 1967, the U.S. Navy, Western Electrochemical Company, and the American Potash and Chemical Company manufactured perchlorate at a facility in Henderson, Nevada. The United States owned part of the facility from 1953 to 1962. In 1967, the Kerr-McGee Corporation acquired the facility and continued to manufacture perchlorate until 1998, when it ceased production after the chemical was found in nearby groundwater. Kerr-McGee is presently cleaning up perchlorate contamination under a consent order with the Nevada state environmental agency. The American Pacific Corporation also manufactured perchlorate near Henderson from 1958 until 1988, when its facility was destroyed in an explosion. American Pacific relocated its perchlorate production to Utah and is currently the sole manufacturer of perchlorate in the United States.

In your recent letter to GAO, you asked us to report on the following:

1. What portion of the perchlorate compounds produced at Henderson, Nevada, from 1945 until the present went to supply the U.S. government's defense and space programs, either directly through prime contracts or indirectly through subcontracts under prime contracts?

2. From 1945 until the present, what ties did the U.S. government have to perchlorate production facilities in Henderson, Nevada, including, but not limited to, ownership of land, buildings and production equipment, and subsidization of plant capacity expansions?

3. What was the role of the United States and its prime contractors in "making" or "influencing" the market for perchlorate compounds, either by determining a large portion of the total demand for perchlorate compounds, or by other means?

4. What costs have been incurred to date by private companies and by the United States to remediate perchlorate contamination at the Henderson, Nevada, facilities, and what is the best current estimate of potential future remediation costs in Henderson?

5. What financial responsibility, if any, should the United States assume for perchlorate contamination at sites that produced perchlorate compounds for federal governmental programs?

The issue of liability for perchlorate cleanup is currently the subject of litigation between the Kerr-McGee Corporation and the United States. In 2000, Kerr-McGee initiated litigation against the United States, seeking reimbursement for cleanup costs. The case is still in the pretrial stage. The information you requested above is among the issues being addressed as part of the pending court case. It is a long-standing GAO policy to refrain from taking a position on or addressing matters that are pending in litigation.

During a June 2005 meeting with your staff, we agreed to document why we could not undertake the study you originally requested, and we also agreed to report on general issues relating to the federal government's responsibility for environmental cleanup on land that it transfers or sells to other parties. This report discusses (1) laws governing the transfer of contaminated federal property to private parties, both before and after the enactment of a 1986 amendment to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) that specifically governs such transfers, and (2) the degree to which private parties not subject to civil actions under CERCLA may seek environmental cleanup costs from other responsible parties in the wake of the recent Supreme Court decision in *Cooper Industries v. Aviall Services*, and subsequent cases. In conducting our work, we examined statutes and regulations governing the cleanup and transfer of contaminated federal property. We also researched and analyzed court cases addressing the degree to which private parties may recover the costs they incur in cleaning up contaminated properties.

Three Principal Federal Laws Govern the Transfer of Contaminated Federal Property to Private Parties

While there are numerous laws that have some impact on the transfer of contaminated federal property to private parties,[1] the following three federal statutes (and associated regulations) specifically require some combination of cleanup actions, notice of contamination, and retained federal cleanup responsibility following transfer of the property:

- Federal Property and Administrative Services Act of 1949 (Federal Property Act
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
- Superfund Amendments and Reauthorization Act of 1986 (SARA

Under the Federal Property Act, each federal agency has a continuing responsibility to identify property that has become excess—no longer needed by the agency to carry out its programs or activities. The agency must report such property to the General Services Administration (GSA). GSA then must determine if any other federal agency, mixed-ownership government corporations,[2] or the District of Columbia has a need for the property. If no other agency needs the property, GSA declares it unneeded by the government and identifies it as surplus. Generally, surplus property must be disposed of after publicly advertising for bids.

Regulations under the Federal Property Act have long recognized the importance of decontaminating federal property prior to transfer, but the regulations were initially drafted in very general terms and provided no specific procedures for ensuring compliance. For example, since 1964, GSA regulations have required any agency reporting excess property that is dangerous or hazardous to health and safety to state the extent of such contamination, the plans for decontamination, and the extent to

[1] For a comprehensive list of statutes affecting federal property transfers, including environmental statutes, see GAO, *Real Property Dispositions: Flexibility Afforded to Meet Disposition Objectives Varies*, GAO/GGD-92-144FS (Washington, D.C.: Sept. 18, 1992).
[2] Mixed-ownership corporations include such entities as the Federal Deposit Insurance Corporation and the Federal Home Loan Banks.

which the property could be used without further decontamination.[3] The 1964 regulations made the landholding agency responsible for all expense to the government and for supervising the decontamination of excess and surplus property under the agency's jurisdiction. The regulations required the agency to inform GSA of any hazards related to such property "in order to protect the general public from such hazards and to preclude the government from any and all liability resulting from indiscriminate disposal or mishandling of contaminated property." However, the regulations did not specifically oblige the government to transfer the property free of contamination, notify the transferee of the contamination, or provide any procedures for making claims against the government in the event the property was contaminated. In addition, any potential legal action against the government would have been impeded by the federal government's sovereign immunity.[4]

CERCLA established the Superfund program to clean up highly contaminated hazardous waste sites.[5] CERCLA authorizes EPA to compel parties responsible for the contamination to clean up the sites; allows EPA to pay for cleanups and seek reimbursement from responsible parties; and establishes a trust fund (known as the Superfund) to help EPA pay for cleanups and related program activities.[6] The law also allows responsible parties who have undertaken efforts to clean up properties contaminated by hazardous substances to seek contribution from other parties liable under CERCLA for cleanup costs incurred.

CERCLA established that past owners or operators of contaminated property, including the U.S. government, may be held responsible for the contamination. The law waived the federal government's sovereign immunity, providing that each agency shall be subject to and must comply with the act in the same manner and to the same

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[3] The 1964 regulations defined "decontamination" to mean "the complete removal or destruction by flashing or explosive powders; the neutralizing and cleaning out of acid and corrosive materials; the removal, destruction or neutralizing of toxic or infectious substances; and the complete removal and destruction by burning or detonation of live ammunition from contaminated areas and buildings." 41 C.F.R. § 101-47.103-5 (1964). This definition remains the same today. 41 C.F.R. § 102-71.20 (2004). Current GSA regulations contain more detailed provisions governing the decontamination of property to be transferred out of federal ownership, much of which reflects the language of section 120(h) of CERCLA, which we discuss in more detail below. See, for example, 41 C.F.R. § 102-75.125 (property title report must include a statement indicating whether any hazardous substance activity took place during the time that the property was owned by the United States); 41 C.F.R. § 102-75.340(b) (property conveyance document must include a statement that the government has taken all cleanup action necessary to protect human health and the environment); and 41 C.F.R. § 102-75.955 (landholding agency is responsible for supervising decontamination of excess and surplus real property that has been contaminated with hazardous materials of any sort).

[4] Absent a statutory waiver, sovereign immunity shields the federal government and its agencies from suit. For example, *Department of Army v. Blue Fox*, 525 U.S. 255, 260 (1999).

[5] EPA places the nation's most seriously contaminated sites, which typically are expensive and can take many years to clean up, on its National Priorities List (NPL). EPA uses its Hazard Ranking System, a numerical scoring system that assesses the hazards a site poses to human health and the environment, as the principal mechanism for determining which sites are eligible for placement on the NPL.

[6] In addition, the law establishes a process for cleaning up hazardous waste at federal facilities, although the Superfund trust fund is generally not available to fund these federal cleanups, which are funded from federal agency appropriations.

extent, both procedurally and substantively, as a nongovernmental entity, including with regard to liability. As a result of the sovereign immunity waiver and CERCLA's broad definition of liability, the government has in some instances been held liable under CERCLA for cleanup costs at properties that are privately owned.

Court cases assessing whether the federal government is liable for cleanup costs have engaged in fact-intensive inquiries. For example, in *FMC v. Department of Commerce*, a federal appellate court held that the federal government had substantial control over a facility producing war-related products during World War II because, among other things, the government determined what product the facility would manufacture and controlled the supply and price of the facility's raw materials and, thus, could be considered operator of the facility under CERCLA.[7] However, in *East Bay Municipal Utility District v. U.S. Department of Commerce*, a federal appellate court held that the federal government did not exercise actual control over operations at a zinc mine during World War II, so as to render it liable as an operator, even though it imposed price and labor restrictions intended to protect its efforts to acquire zinc for munitions production, provided financial backing for the mine and, entered into an output contract with the mine[8].

In 1986, Congress passed SARA which amended CERCLA and contained provisions authorizing, and in some cases requiring, the cleanup of federal property prior to its transfer into private hands. Specifically, the law added section 120, which established a program for cleaning up federal facilities, including section 120(h), which governs the transfer of certain contaminated federal property.

Under section 120 of CERCLA, EPA must, where appropriate, evaluate hazardous waste sites at federal facilities to determine whether the waste sites qualify for inclusion on the National Priorities List, which is EPA's list of the nation's most serious hazardous waste sites. For each facility listed on the National Priorities List, section 120(e)(2) of CERCLA requires the landholding agency to enter into an interagency agreement with EPA for the completion of all necessary remedial actions. The interagency agreement must include, among other things, the selection of and schedule for the completion of the remedial actions.

Moreover, section 120(h)(3) requires that the federal government include in any deed transferring property to a private party after October 16, 1990, a covenant warranting that

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[7] 29 F.3d 833, 843 (3d Cir. 1994). Also see, *FMC v. Department of Commerce*, 786 F.Supp. 471, 486 (E.D. Pa. 1992) (federal government ownership of installations, equipment, and pipelines associated with a high-tenacity rayon plant made the government liable as an owner for cleanup costs); *E.I. Dupont de Nemours v. United States*, 365 F.3d 1367, 1372 (Fed. Cir. 2004) (federal government was liable for CERCLA costs under an open-ended contract indemnification clause in the contract with the owner and operator of the ordnance plant).

[8] 142 F.3d 479, 484-85 (D.C. Cir. 1998).

(i) all remedial actions necessary to protect human health and the environment with respect to any hazardous substance remaining on the property have been taken before the date of transfer and

(ii) any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States.[9]

Section 120(h)(3) only applies to federal property on which hazardous substances were (a) stored for 1 year or more, (b) known to have been released, or (c) disposed of. Thus, some contaminated federal properties are not covered by section 120(h)(3). For example, because the definition of hazardous substance excludes petroleum, those properties contaminated solely with petroleum would not be covered.

Section 211 of SARA established the Defense Environmental Restoration Program that requires DOD to identify, investigate, and clean up environmental contamination and other hazards at active and closing installations as well as formerly used defense sites.[10] DOD's policies for administering cleanup programs are outlined in its guidance for managing its environmental restoration program and generally follow the CERCLA process for identifying, investigating, and remediating sites contaminated by hazardous substances.

Parties Who Carry Out Voluntary Cleanups Have Limited Ability to Recover Cleanup Costs

Courts have interpreted the liability of responsible parties under CERCLA to be joint and several. Under joint and several liability, when the harm done is indivisible, one party can be held responsible for the full cost of the cleanup, even though that party may be responsible for only a portion of the hazardous substances at the site. Such a party may then seek to recover a portion of its cleanup costs from other responsible parties. However, a recent Supreme Court decision has limited the ability of responsible parties who voluntarily clean up their property to recover costs from other responsible parties under CERCLA [11]

Between 1980 and 1986, several courts held that a voluntary party—that is a private party that has incurred cleanup costs, but that has done so voluntarily and is not itself subject to suit under CERCLA—could seek to recover some of those cleanup costs from other parties under section 107(a), which is the CERCLA provision that establishes cleanup liability.[12] In 1986, CERCLA was amended to include a specific

[9] 42 U.S.C. § 9620(h)(3)(B). Section 120(h) also requires the government to notify potential buyers of all known hazardous substances on the property. 42 U.S.C. § 9620(h)(3)(A).

[10] A formerly used defense site is a property that DOD formerly owned, leased, possessed, operated, or otherwise controlled, and that was transferred from DOD prior to October 17, 1986.

[11] In this report, we refer to such parties as "voluntary parties."

[12] See, for example, *Wickland Oil Terminals v. Asarco, Inc.*, 792 F.2d 887, 890-892 (9th Cir. 1986); and *Philadelphia v. Stepan Chemical Co.*, 544 F.Supp. 1135, 1140-1143 (E.D. Pa. 1982). In this report, we also use the term "voluntary party" to refer to parties subject to enforcement action under statutes other than CERCLA, such as parties compelled to clean up their facilities under state hazardous waste programs under the Resource Conservation and Recovery Act.

action for "contribution," codified as section 113(f) of CERCLA.[13] Section 113(f)(1) states that "any person may seek contribution from any other person who is liable or potentially liable under section 107(a) of this title, during or following any civil action" under CERCLA.[14]

In 2004, the Supreme Court in *Cooper Industries v. Aviall Services* held that this statutory language prohibits a voluntary party from seeking contribution from another responsible party.[15] The plaintiff in *Aviall*, Aviall Services, purchased an aircraft maintenance business from the defendant, Cooper Industries, and continued operating the business for a number of years. When Aviall Services learned that it and Cooper Industries had polluted the site, Aviall Services notified the Texas state environmental agency. The state then instructed Aviall Services to clean up the site under the threat of an enforcement action. Aviall Services cleaned up the site and then filed suit against Cooper Industries under section 113(f)(1), seeking contribution. Since Texas did not take formal enforcement action against Aviall Services, its cleanup action is considered to be voluntary.

In reversing a lower court decision, the Supreme Court held that Aviall Services was not entitled to seek recovery under section 113(f)(1) because Aviall Services had not been sued under CERCLA. The Court focused on the language in the provision stating that "any person *may* seek contribution . . . *during or following* any civil action" under CERCLA.[16] The Supreme Court explained that reading the statute to allow contribution claims to occur in the absence of such an action at any time would render the italicized language superfluous.

After the Court's decision in *Aviall*, voluntary parties have instead sought contribution from other responsible parties under section 107(a), which had previously been used in some cases before the enactment of section 113. However, a majority of district courts confronting the issue since *Aviall* have held that voluntary parties may not pursue contribution actions against other responsible parties under section 107. For example, in *Mercury Mall Associates v. Nick's Market*, the district court held that section 113(f) provided the only avenue for a responsible party to seek cleanup costs from another.[17] The court noted that in a pre-*Aviall* case, the Fourth Circuit had held that section 113(f) was the only CERCLA provision under

[13] Section 113(f)(1) provides in full as follows: "Any person may seek contribution from any other person who is liable or potentially liable under section 107(a) of this title, during or following any civil action under section 106 of this title or under section 107(a) of this title. Such claims shall be brought in accordance with this section and the Federal Rules of Civil Procedure, and shall be governed by Federal law. In resolving contribution claims, the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate. Nothing in this subsection shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section 106 of this title or section 107 of this title."

[14] Section 113(f)(3)(B) provides that a party who has resolved its cleanup liability in a settlement with the federal government or a state government may also seek contribution from other responsible parties who have not settled.

[15] 125 S. Ct. 577 (2004).

[16] 125 S. Ct. 583 (emphasis added).

[17] 368 F. Supp. 513 (E.D. Va. 2005).

which one responsible party could sue another, and that nothing in the *Aviall* case had changed that result. However, the court also observed that leaving voluntary parties without a remedy against other responsible parties "seems to undermine the twin purposes of the statute, which are to promote prompt and effective cleanup of hazardous waste sites and the sharing of financial responsibility among the parties whose actions created the hazard."[18]

In contrast, a few courts have held that voluntary parties may continue to recover costs from other parties under section 107. For example, in *Vine Street LLC v. Keeling*, the court held that the current owner of a contaminated lot could maintain a claim against another potentially responsible party (in this case, a chemical company) under section 107, despite the fact that the current owner was also a potentially responsible party.[19] The court explained that section 107 specifically authorizes voluntary parties to seek costs from other responsible parties, while section 113(f) created a separate cause of action, allowing parties that have been subject to cost recovery actions to allocate liability among themselves.

No federal appellate courts have ruled on this issue since *Avill*,[20] making it difficult to determine the case's impact on voluntary cleanup activities. The *Aviall* decision may complicate efforts to clean up contaminated properties by providing a disincentive for parties to voluntarily carry out such cleanups. On the other hand, the decision may provide an incentive for parties to settle their CERCLA liability with the federal government since parties who enter into an administrative or judicially approved settlement with the government may obtain contribution under CERCLA. Nonetheless, as the court in *Mercury Mall* observed, the result of the *Aviall* decision is not likely to facilitate the prompt and effective cleanup of contaminated properties.

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As agreed with your office, we plan no further distribution of this report until 30 days after the date of this report. At that time, the report will be available on GAO's home

[18] 368 F. Supp. 513, 519.
[19] 362 F. Supp.2d 754, 760 (E.D. Tex. 2005).
[20] In dictum, the United States Court of Appeals for the Tenth Circuit in *Young v. United States*, 394 F.3d 858, 862 (10th Cir. 2005), indicated that a pre-*Aviall* Tenth Circuit case that restricted responsible party contribution claims to section 113(f) remained the controlling precedent.

page at http://www.gao.gov. If you have any questions, please contact me at (202) 512-3841.

Sincerely yours,

Anu K. Mittal
Director, Natural Resources
and Environment

(360584)

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