



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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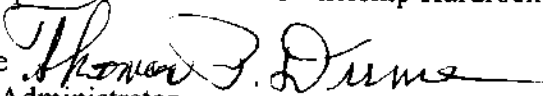
APR 26 2005

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

OSWER Directive 9200.4-38

**MEMORANDUM**

**SUBJECT:** Policy on Joint Repositories at Mixed-Ownership Hardrock Mine Sites

**FROM:** Thomas P. Dunne   
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**TO:** Regional Administrators I-X

**PURPOSE**

This memorandum presents the Office of Solid Waste and Emergency Response's (OSWER) policy on placement of hardrock mine waste in joint repositories at mixed-ownership, abandoned hardrock mine sites and mining-impacted watersheds. Regions<sup>1</sup> are encouraged to work with Federal Land Managers (FLMs) in accordance with this policy to maximize the appropriate use of joint repositories located on public lands under the jurisdiction of FLMs (e.g., Department of the Interior – Bureau of Land Management, and Department of Agriculture – Forest Service), on private property, or both.<sup>2</sup> This policy has been developed as part of the One Cleanup Program Federal Environmental Workgroup initiative.

Based on the criteria described in this memorandum, OSWER encourages Regions to consider the benefits of using joint repositories as a potential cleanup option to address human health and environmental risks at abandoned mixed-ownership, hardrock mine sites, and/or mining-impacted watersheds. In appropriate circumstances, the use of a common mine waste repository allows one agency to be designated as the lead agency for the repository and allows the use of inter-agency agreements (e.g., pursuant to the Economy Act) to share costs, with potentially significant cost savings related to full-time equivalents (FTEs), response, and contracting.

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<sup>1</sup>Unless otherwise indicated, the term "Region" in this guidance means an EPA Region.

<sup>2</sup> It is anticipated that there may be sites where the most appropriate location of the joint mine waste repository includes both private and Federal land.

## **BACKGROUND**

For purposes of this guidance, mixed ownership mine sites generally are those located partially on private land and partially on public land.<sup>3</sup> There are numerous mixed-ownership, abandoned hardrock mine sites/mining-impacted watersheds. The Forest Service estimates, for example, that there are over 200 such sites in its Region 1 (Montana, North Dakota, Northern Idaho, and Northwestern South Dakota) that could require a repository for their wastes.

Where appropriate, Regions and FLMs should work together to conduct response actions that reduce risks to human health and the environment.<sup>4</sup> Based on past experience where EPA and FLMs have coordinated response actions at joint repositories, it may be appropriate to consolidate and place waste in a common mine waste repository located on private land, federal land, or both.<sup>5</sup> In such cases, the Region should enter into a memorandum of understanding

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<sup>3</sup> The United States has taken the position and courts have held that the General Mining Law (GML or the 1872 Mining Law) allows a person to establish private rights to mine minerals on federally-owned land by staking a claim to the land. The claimant gains the rights to beneficial use of the property incident to mining, but the fee simple title remains with the federal government. The claim is considered private property, is taxable, and can be sold, leased, bequeathed, etc. If the claim is abandoned or otherwise becomes invalid, all of the property rights revert to the federal government under the control of the FLM. Furthermore, a claimant may, through a process called "patenting," buy the fee simple interest from the federal government and own the property in its entirety. If the owner of this patented property abandons it, the property does not revert to the United States, but remains private land. The effect of the GML is that thousands of former mine sites are now private properties ("inholdings") within the external boundaries of federal lands managed by FLMs.

<sup>4</sup>Where appropriate, Regions also should coordinate with relevant state agencies as provided in Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (for example, 40 CFR §300.435 and Subpart F).

<sup>5</sup> In some instances, EPA has placed mining wastes from CERCLA clean-ups in repositories located on private lands. These repositories may co-mingle wastes, and in some circumstances may also involve the co-disposal of mine waste from federal lands. For example, at the Luttrell Pit in Montana (EPA Region 8, Forest Service Region 1 and BLM - Montana) and the Stibnite Mine in Idaho (EPA Region 10 and Forest Service Region 4) mine wastes from both private and federal lands will be deposited into a joint repository located on private lands. For each of these Sites, EPA and the FLMs entered into a repository agreement under which the FLM agreed to seek funding for its apportioned share of future response costs in the event of a repository failure based on the volume of mine waste contributed to the repository from federal lands.

(MOU) with the relevant FLM to coordinate the agencies' respective exercise of their authorities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Executive Order 12580.

Historically, public lands have often been used to dispose of various wastes, including mining wastes. In some instances, the legal status of mine waste abandoned on federal lands may be complicated.<sup>6</sup> The Forest Service and the Bureau of Land Management (BLM) have developed general policies that restrict waste disposal, including mining wastes, on their lands, and both the Forest Service and BLM have issued policies allowing their participation in joint repositories.<sup>7</sup> Consistent with these policies, the FLMs are willing to place waste repositories on federal lands and accept private waste being handled under EPA authorities in appropriate circumstances.<sup>8</sup>

## **DEFINITIONS**

For the purposes of this policy, Regions should use the following definitions.

**Joint Mine Waste Repository** – A joint mine waste repository is defined as an engineered on-site disposal unit, located on either federal or private lands, or both, where wastes from both private lands and federal lands, generated from extraction, beneficiation and mineral processing (as defined by 40 CFR §261.4(b)(7)), are disposed or placed.

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<sup>6</sup>Because of the unique nature of the ownership rights granted mining claimants under the 1872 Mining Law, the United States has taken the position and courts have held that the United States is not liable under CERCLA section 107 as an owner for mine contamination left behind on public lands by miners operating under the 1872 Mining Law. See United States v. Friedland, 152 F. Supp. 2d 1234 (D. Colo. 2001); United States v. ASARCO, Inc., et al., 280 F.Supp. 2d 1094 (D. Idaho 2003). These courts have also held that the United States is not liable under CERCLA section 107 as an "operator" as a result of the encouragement of mining by the Government during World War II. Furthermore, on June 24, 2003, the Director of the EPA's Federal Facilities Enforcement Office (FFEO) issued a policy memorandum entitled "Policy on Listing Mixed Ownership Mine or Mill Sites Created as a Result of the General Mining Law of 1872," providing guidance to Regional Docket Coordinators on how to treat "mixed ownership" mine or mill sites (created as a result of the 1872 Mining Law) for purposes of the CERCLA Section 120(c) Federal Agency Hazardous Waste Compliance Docket.

<sup>7</sup>According to the Forest Service and BLM, these policies include a requirement that the FLM enter into written repository agreements with their respective partner agencies that include a commitment to apportion future response costs based on the volume of mine waste contributed to the repository from federal lands compared to the volume contributed from private lands.

<sup>8</sup>According to the Forest Service and BLM, for joint repositories located on private lands under EPA authorities, the FLM will agree in writing to seek funding for its apportioned share of future response costs.

Abandoned/Inactive Mine Sites – Abandoned mines are sites where there is no longer an unpatented mining claim located under the GML, as amended (30 USC §22-54, 161, 162, 661-615). Inactive mines are sites where extraction, beneficiation or processing activity have been determined to be inactive or permanently stopped.

Mine/Mining Waste – Mine wastes include all wastes from extraction, beneficiation and mineral processing as defined by 40 CFR §261.4(b)(7). Mining wastes that may be placed in a joint mine waste repository include ore, waste rock, overburden, or mill tailings from hardrock mining sites.

Hardrock Mining Sites – Hardrock mining sites are defined as mines, mills, or watersheds where mining operations have been located and conducted under the GML. Also known as “locatable” minerals, hardrock minerals refer to minerals, that, for federal lands with public domain status in the United States, are acquired under the authority of the GML. These are typically the base and precious metal ores, ferrous metal ores, certain classes of industrial minerals, and uncommon varieties of sand, gravel and dimension stone.<sup>9</sup>

## **CRITERIA**

By placing mine waste in a joint mine waste repository, the Region should recognize that it is entering into a potentially long-term relationship and that the joint repository may require operation and maintenance, post-removal site control, periodic inspections, and potential future response actions for many years to come. In considering whether to use a joint mining waste repository, Regions should consider a number of environmental, engineering and economic factors, including, but not limited to:

1. The topography, hydrology, and geomorphology of a proposed joint repository.
2. Potential increased risks to human health and the environment that could result if a joint repository is not utilized, such as a possible increased risk due to transport associated with off-site disposal of waste.
3. Whether the FLM has agreed to take adequate steps to ensure that a federal joint repository site will not be disturbed in a manner that could jeopardize its integrity.<sup>10</sup>

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<sup>9</sup>This policy is not intended to apply to leaseable minerals (e.g., oil, gas, coal, oil shale, phosphate, sodium, potassium, sulfur, asphalt or gilsonite) or saleable mineral materials (e.g., common varieties of sand and gravel).

<sup>10</sup>Mining wastes from historic mines may contain gold or other valuable minerals in amounts recoverable with modern technologies. Under the GML, unless the land is “withdrawn from mineral entry,” a miner can claim the joint repository site and, potentially, mine it. Both the Forest Service and BLM have authority to take appropriate action to ensure that re-mining or other activities do not jeopardize the integrity of the joint mine waste repository. The Forest

4. If the repository is to be constructed by the FLM, the Region should review and determine that all design and construction specifications of the joint repository meet EPA's view of what constitutes best engineering practices established for such waste containment units. Similarly, for sites on private land, the Region should provide the FLM an opportunity to review and determine that all design and construction specifications of the joint repository meet the FLM's view of what constitutes best engineering practices established for such waste containment units.
5. If the joint repository is to be undertaken as a removal action, the Region should prioritize the funding needs for other sites in the Region versus funding the particular joint repository under consideration.<sup>11</sup>
6. The Region should consider whether cost savings associated with a joint repository could allow additional cleanup work to be achieved in the Region at other sites.
7. Whether there are viable private potentially responsible parties (PRPs) that will pay for the costs associated with their portion of the waste being disposed of in a joint repository, including post-removal site control and possible failure of the joint repository in the future.
8. The cost-effectiveness for the federal government as a whole if a joint repository is not used by EPA and the FLM (so that both agencies end up paying for the construction of separate repositories or off-site disposal).
9. The state's position on payment of costs associated with operation and maintenance, post-removal site control, and other expenses.

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Service and BLM are currently developing internal guidance on this issue. If the joint repository is re-mined, EPA generally should terminate the joint repository agreement and will not seek funding for a response action at a joint mine waste repository in the event of a failure. For sites on private land, EPA should ensure that re-mining or other activities do not jeopardize the integrity of the joint mine waste repository. It should be noted that if a joint mine waste repository on private land is re-mined, the FLM also has the option to terminate the joint repository agreement and not seek funding for a response action at the repository in the event of a failure.

<sup>11</sup> If the Region undertakes a joint repository pursuant to CERCLA authority to conduct removal actions, it should consider the relevant statutory criteria (such as CERCLA section 104(c)(1)), the National Contingency Plan (NCP), and appropriate Agency guidance. For example, the NCP states that "... provision for post-removal site control following a Fund-financed removal action ..[should] be made prior to initiation of the removal action." 40 C.F.R. §300.415(k). The Region should use all relevant existing criteria and determine if it will use its removal advice of allowance to fund such an action.

## SAMPLE MOU

Where the Region believes, based on the criteria described above, it is appropriate to enter into an MOU with an FLM to use a joint repository, it should consider the sample MOU attached to this guidance, which among other things, addresses:

1. An appropriate financial arrangement to allocate responsibility for response costs associated with construction, post-removal site control, and potential repository failure. For example, the share of such costs could be allocated on the basis of the volume of mine waste contributed, either from a private site land into a joint repository located on federal land or from federal land into a joint repository located on private land.<sup>12</sup> For a joint repository located on federal land, the Region should provide adequate assurance in the repository MOU, to the extent allowed by applicable legal provisions such as the Anti-Deficiency Act, 31 U.S.C. § 1341, that EPA will seek funding based on the apportioned share of mine waste from private lands to provide an appropriate response action in the event of future failure of the joint repository. In determining whether it is appropriate to seek such funding, the Region should consider if the FLM has taken all necessary steps to prevent activities that disturb the integrity of the joint repository.<sup>13</sup>

2. Appropriate assurances that EPA or the FLMs will take all necessary steps to: a) maintain the integrity and protectiveness of the joint repository with regard to all wastes placed in that repository; and, b) ensure that the repository will not be disturbed.

3. An appropriate termination provision that recognizes either party's right to withdraw from the MOU for good cause. What constitutes "good cause" depends on site-specific circumstances and should be determined on a case-by-case basis; however, re-mining of the repository, whether located on private or federal land, generally would constitute good cause to terminate the MOU.

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<sup>12</sup> The apportionment of future costs between EPA and the FLM may be based on the waste placed in the repository from private land, which is the responsibility of EPA, and the waste placed in the repository from federal land, which is the responsibility of the FLM. While the volume of mine waste from private land versus the volume of waste from federal land could be the basis of the apportionment, other factors (e.g, density, contaminant concentration, etc.) may be appropriate and the actual cost allocation formula for the site should be determined on a case-by-case basis.

<sup>13</sup> For example, it would not be appropriate for EPA to seek funding for a response action at a joint mine waste repository in the event of a failure resulting from re-mining of the repository. In such a case, the mine operator may be pursued under CERCLA to pay for or conduct the response action.

## **IMPLEMENTATION:**

OSWER encourages the Regions to use the attached sample MOU to enter into site-specific joint repository agreements at mixed-ownership mine sites with FLMs in appropriate circumstances. This policy memorandum gives guidance on key issues that Regions should consider prior to entering any such agreements involving the use of a joint repository at such sites.

### Attachment

cc: Superfund National Policy Managers (Regions I-X)  
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