

Community Fill Plan Using Metals-Impacted Materials within the ICP Boundary

Background

The United States Environmental Protection Agency (EPA) issued Records of Decision (RODs) outlining remedial actions for community areas of the Bunker Hill Superfund Site (Site) in 1991, 1992 and 2002. Generally, the chosen remedy has called for partial removal of contaminated materials where they pose unacceptable risks to human health, disposal in constructed repositories, and replacement with clean materials. Constructed repositories are used for contaminated material disposal at this and many other Superfund sites since they are subject to engineering controls, institutional controls, long term operation and maintenance, and monitoring to ensure long term protection and integrity of the remedy.

Since the remedy at Bunker Hill for residential yards and commercial properties is typically only a partial removal and contaminated materials lie beneath the clean soil barriers throughout most communities, the respective RODs called for institutional controls to ensure that barriers are protected and constructed as development and re-development occur within the Site. Because of geographic and jurisdictional considerations, the Idaho Department of Environmental Quality (IDEQ) called upon Panhandle Health District (PHD), acting through its local board of health, to promulgate rules designed to govern long-term Site-related contaminant management. The locally-adopted rules or collectively the "Institutional Control Program" (ICP), were developed to implement and enforce practices that establish and sustain barriers to prevent human exposure to contaminants and maintain records of compliance with the remedy prescribed by the respective RODs.

The result is that contaminated materials are managed and disposed of in a variety of ways. In some cases, materials are transported to and disposed of at repositories by Remedial Action contractors. In other cases, contaminated materials are hauled by homeowners and private contractors to repositories or placed in other areas on their property and capped in compliance with the ICP. All of these methods are designed to protect human health and prevent contaminant migration into areas that are not contaminated.

Purpose

During the course of the cleanup, the agencies (EPA, IDEQ, and PHD) have continued to hear concerns from the local communities about the space the repositories occupy in a valley with limited flat ground for development. In lieu of disposal of all ICP-generated material in constructed repositories, there has been a desire to fill in low lying areas within the Site with contaminated material followed by construction of protective barriers overlying the contaminated material as required by the ICP. To that end and in compliance with the ICP rules and practices, PHD has approved the use of select ICP generated materials as construction fill.

The purpose of this Community Fill Plan (CFP) is to formally recognize this activity and identify procedures required when moving contaminated material from property to property within the ICP Administrative Boundary (ICP boundary). This CFP also acknowledges the jurisdiction of EPA and IDEQ in implementation of the ICP as a portion of the selected remedy of the RODs, and recognizes that larger scale fills warrants additional evaluation due to their size and potential impact to human health and the environment. Nothing in the CFP contravenes any provision of the ICP as it is, and has been, administered by PHD. Records for all fill projects will be maintained in PHD's records repository.

This plan is intended to provide an alternative to disposal in constructed repositories for some ICP generated material and to establish a reserve of properties ready to receive contaminated fill material from future construction projects when they are identified. Cleanup actions conducted by EPA or IDEQ as part of remedy implementation may occur over extended periods of time and in some cases contain significant volumes of highly contaminated material. For these reasons this material will continue to go to constructed repositories which are sited in accordance with a four-step process identified in the 2002 ROD. The continued use of constructed repositories in combination with this CFP will help preserve space in repositories for both cleanup and ICP material for the long-term while helping the local community maximize the opportunity to create developable land.

Agency Roles and Responsibilities

PHD will continue its permitting and record-keeping activities as authorized by IDAPA 41.01.01, rules adopted by the District Board of Health and affirmed by the Idaho Legislature. Pursuant to the rules it has adopted, PHD issues no-fee permits, provides contractor licensing, oversees performance of excavation, grading, construction, barrier requirements, Best Management Practices, health and safety, and provides specific requirements for certain interior remodeling projects. PHD also educates and licenses contractors who perform such activities within the ICP boundary. In most cases to date, contaminated material generated by the ICP program has gone to constructed repositories in the Box and Basin.

PHD will also continue to serve as the local lead agency for maintaining records, communicating with landowners and developers, issuing permits, ensuring compliance with permits, and responding to inquiries associated with CFP projects. Records maintained by PHD are available for public inspection, subject to privacy limitations imposed by the Idaho Public Records Law, in order to support the transfer of interests in real estate and other activities that sustain commerce in the Silver Valley. ICP records are also made available to IDEQ for purposes of contract management and to both IDEQ and EPA for periodic oversight reviews. At a minimum, the PHD will be responsible for tracking and documenting the following information for all CFP projects.

- Contaminated soil source and fill sites, using assessor parcel numbers and maps to identify each property
- Contaminated soil source and fill sites owners and addresses
- Approximate quantity of contaminated soil excavated and fill based on truck counts
- Soil sample analytical results for both source and fill areas
- Other information used to determine lead and arsenic concentration and other information that indicates the presence of other contaminants of source and fill areas
- Planned duration of fill activity, changes to schedules, and actual duration of the project
- Description of the ICP barrier to be placed on the fill and verified by site inspections

The ICP permit requires the landowner to maintain the filled area in accordance with the ICP. The permit also requires the permit applicant to acknowledge that they understand that the ICP does not authorize violation of other “federal, state, or local laws that regulate construction, environmental protection or Institutional controls”. It also states “that all governing ordinances will be obeyed.”

The PHD will review all fill sites less than 5,000 cubic yards against Threshold Criteria 1 through 4 listed in Appendix A. The PHD will document sites that meet the criteria using the checklist or will notify the fill site owner, EPA, and IDEQ of sites that do not meet the criteria. The EPA and IDEQ will also review

these sites for all Threshold Criteria, but will focus on Threshold Criteria 5 through 9 as 1 through 4 receive a thorough review by PHD. The EPA and IDEQ will also evaluate projects larger than 5,000 cubic Yards using the Balancing Criteria in Appendix A. The EPA and IDEQ will follow up with the property owner if they have questions about the criteria and use of their property as a fill site.

On an annual basis or as otherwise requested the PHD will provide CFP project information to IDEQ and EPA in summary form along with a backup copy of CFP permits and associated records. A copy of the summary will also be provided to the Restoration Partnership.

For fill sites within the ICP boundary that have a receiving capacity in excess of 5,000 cubic yards, PHD will refer applicants seeking to fill on such a scale to EPA and IDEQ for their evaluation. EPA and IDEQ will review the suitability of such potential fill locations based upon criteria developed by the agencies pursuant to legal authority that allows them to take additional steps to protect human health and the environment. General authority for such actions is found in CERCLA Section 104(a) (42 U.S.C. 9604(a)). A list of the criteria to be used by the EPA and IDEQ to evaluate sites is attached in Appendix A. This list may be modified in the future. The list includes Threshold Criteria that must be met for a fill project to proceed and Balancing Criteria whose consideration may lead to mitigation of issues or, if significant enough, may lead to rejection of a project.

Approval of large fill sites (>5,000 cy) by EPA and IDEQ will be in writing identifying possible conditions, recommendations, or issues of concern, recognizing that PHD has only such powers as may be granted by Idaho statute and PHD-adopted rules. EPA and IDEQ will also notify the Restoration Partnership about approval of large fill sites so that they may approach the property owner about potential restoration projects on their property. PHD will maintain records and supplemental information provided by IDEQ and EPA as a result of their evaluation and recommendations on sites that exceed 5,000 cubic yards in volume. It is the agencies' expectations that the implementation of the CFP with PHD's oversight and enforcement will be at least as protective of human health as disposal in a repository.

The PHD may implement the CFP without notification to EPA and IDEQ for CFP projects with a receiving capacity of less than 500 cubic yards of material. The PHD will provide notification to EPA and IDEQ for CFP projects with source or receiving capacity between 500 and 5,000 cubic yards. The EPA and IDEQ are obligated to review sites for Threshold Criteria 5 through 9 and to respond if the PHD requests their participation. The purpose of the notification is to make the two agencies aware of the expected work. For fill sites within the ICP boundary that have a receiving capacity in excess of 5,000 cubic yards, PHD will refer applicants seeking to fill on such a scale to EPA and IDEQ for their evaluation. EPA and IDEQ will review the suitability of such potential fill locations based upon criteria developed by the agencies as discussed above and shown in Appendix A. A summary table of agency responsibilities is included as Appendix B.

Fill Sites and Materials

Excavated ICP materials including soils, mine waste rock, concrete and asphalt grindings with lead concentrations less than 20,000 ppm and arsenic levels less than 15,000 ppm are eligible for transfer from sources and to fill locations within the ICP administrative boundary under the terms of this CFP. Material from within the ICP boundary that exceeds these concentrations cannot be used for CFP projects and must go to a constructed repository. Consistent with Figure 1 of the Bunker Hill Mining and Metallurgical Complex Waste Acceptance Criteria (April 2013), soils containing petroleum hydrocarbons,

chlorinated hydrocarbons, pesticides, herbicides or other hazardous materials above regulatory threshold concentrations are ineligible for CFP use.

Soil testing will generally be required if data is not available for the source site materials. There may be cases for projects less than 500 cubic yards where scheduling and logistics do not provide the opportunity for sampling at CFP source and receiving areas. In these cases visual observations in combination with institutional knowledge, sampling results from adjacent properties, and/or location of soils will be used to determine relative metals concentrations of the materials in question. If sample data is not available and samples are not collected to support permitting of a CFP project, PHD will document specific information relied upon in determining relative metals concentrations of the materials in question in the permit file. It is expected that lack of sampling data will be the exception and not the rule. In any event, the PHD will make the determination that the material is eligible to be used as fill prior to allowing a CFP project to proceed. Soil testing will be required, unless previous results are available, on the source and receiving location of all projects that exceed 500 cubic yards.

Excavated soils from within the ICP boundary shall not be placed on lands outside of the ICP boundary, unless such soils are being placed in a constructed repository in accordance with the RODs. Other environmental regulations may restrict use of areas for fill sites within the ICP boundary, including wetlands, areas below the Ordinary High Water Mark on surface water bodies, and some floodplain locations. Meeting the Threshold Criteria (Appendix A) will help ensure compliance with these requirements. However, it will be the responsibility of the landowner to obtain the necessary authorizations or permits and to comply with applicable federal, state and local regulations as well as the ICP rules. Areas where large-scale remediation is planned or has been completed shall not be used as fill sites for CFP projects without the prior written approval of EPA and IDEQ in order to avoid adverse impacts upon the planned or previously implemented remedy. As previously discussed additional criteria for fill sites is included in Appendix A. The agencies implementing or overseeing the CFP in no way warrant the suitability of the fill for intended or other purposes and that responsibility rests with the landowner.

Contaminated material that results from Remedial Action implementation by EPA, IDEQ or other agencies shall not be used in the CFP. On a case by case basis to the extent that verifiable non-contaminated materials such as coarse durable material can be effectively and efficiently separated from contaminated underlying materials, the non-contaminated materials may be disposed of either at an ICP repository, a Community Fill Project, or recycled if desirable upon approval from the implementing agency.

Revision to the Plan

This Plan will be modified and adjusted over time as appropriate. Implementation during the initial year will help identify effective and workable procedures to meet the needs of both the community and agencies. The three agencies will periodically evaluate the most effective way to implement the CFP and will make modifications to the plan as needed. After one year of plan implementation and annually thereafter, the PHD will provide to IDEQ, EPA, a summary of CFP records compiled in the previous year and a backup electronic copy of all records. EPA and DEQ will then determine if modification of the Plan is needed. After the first year, the agencies will continue to evaluate the plan at least annually.

Appendix A

CFP Large Fill Site Evaluation Checklist

Site Location:

Property Owner Name:

Date Evaluated:

Threshold Criteria must be met for a site to be used as a CFP fill location. All threshold criteria need to be answered with a yes for a site to be eligible.

Threshold Criteria	Check if yes	Comments
1. Owner of fill site is willing to have contaminated soil placed on property for fill		
2. Property owner agrees to maintain the filled area in compliance with the ICP		
3. Fill site is located within ICP boundary		
4. Fill site is in a contaminated area		
5. Fill site is not in an area of future remediation where fill materials would increase RA costs		
6. Fill site is not in a floodway		
7. Fill site is not a wetland		
8. Fill at the site will not adversely impact constructed infrastructure associated with drinking water wells and will not be placed near wells when doing so creates low lying areas where water collects that could compromise the integrity of well seals.		
9. Fill site is above the Ordinary High Water Mark on surface water bodies		

Balancing Criteria are used to assess the overall suitability of a fill site. Some of the criteria are not directly related to Bunker Hill Superfund cleanup issues, but could impact suitability/constructability of a CFP project. These criteria can be used to provide recommendations or place conditions on a project, or

if significant enough, to determine that a site is unsuitable for a CFP project. If conditions are placed on CFP fill site or if a CFP site is determined unsuitable, the agencies will provide a written explanation to the PHD and property owner citing the reasons and appropriate regulatory authority.

Balancing Criteria	Discussion
Property owner is aware of and understands other local, state, and federal regulatory requirements, and is willing to meet those regulatory requirements	
Site Access limitations/concerns	
Proximity to residential areas or other sensitive population uses (day care sites, etc.)	
What type of public notification is required by local governments? Are there other outreach needs?	
Future use of property	
Development schedule	
Special recommendations for interim cap	
Are there special measures that should be taken to ensure protection of human health and the environment?	
Duration of fill activities? Will extended duration cause concerns that will not be covered by the ICP?	
Is fill parcel in an area of planned Restoration Activity?	

DEQ Evaluator – name, title

Date

EPA Evaluator – name, title

Date

Appendix B

Summary of Agency Responsibilities

RESPONSIBILITIES	CFP PROJECT SIZE, cubic yards		
	< 500	500- 5,000	>5,000
PHD			
Sampling data required	Desired	X	X
Fill materials are < 20,000 ppm lead	X	X	X
Fill materials are < 15,000 ppm arsenic	X	X	X
Evaluate and document for Threshold Criteria 1-4			
1. Fill site owner is willing to receive fill	X	X	X
2. Fill site owner agrees to maintain under ICP	X	X	X
3. Fill site is within ICP Boundary	X	X	X
4. Fill site is in contaminated area	X	X	X
Notify EPA and IDEQ		X	X
Issue ICP Permit	X	X	X
Inspect project	X	X	X
Maintain records of projects	X	X	X
Contaminated soil source and fill sites, using assessor parcel numbers and maps to identify each property	X	X	X
Contaminated soil source and fill sites owners and addresses	X	X	X
Approximate quantity of contaminated soil excavated and fill based on truck counts	X	X	X
Soil sample analytical results for both source and fill areas	X	X	X
Other information used to determine metal concentration and the presence of other contaminants of source and fill areas	X		
Planned duration of fill activity, changes to schedules, and actual duration of the project	X	X	X
Description of the ICP barrier to be placed on the fill and verified by site inspections	X	X	X
Annual Report to EPA, IDEQ, and Restoration Partnership	X	X	X
Provide list of or refer potential fill sites > 5,000 cy to EPA and IDEQ for evaluation			X
Review CFP at least Annually	X	X	X
EPA and IDEQ			
Assist PHD with Threshold Criteria 5-9 evaluation	X	X	
Evaluate potential fill sites against Threshold and Balancing Criteria			X
Provide PHD approval of large sites in writing with recommendations and issues			X
Coordinate with PHD on projects with recommendations that are outside of ICP authority			X
Notify Restoration Partnership of sites eligible for CFP			X
Review CFP at least Annually	X	X	X

