

December 3, 2024
RIRM – Public Meeting #2
West End Community Center, 6:00 pm – 8:00 pm

This document contains copies of the handouts and presentation slides provided at the public meeting held December 3, 2024.

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Written comments may be submitted to the undersigned via email, postal mail, or drop-off.

Thank you,



Ashley Blauvelt, P.E., Environmental Engineer IV
Rhode Island Department of Environmental Management
Office of Land Revitalization & Sustainable Materials Management
Site Remediation & Brownfields
235 Promenade Street, Providence, RI 02908
(email) ashley.blauvelt@dem.ri.gov
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Additional Information

Public Meeting #2 – Public Involvement Plan (PIP)

Rhode Island Recycled Metals (RIRM)

434 Allens Avenue, Providence, RI

Site Remediation File No. SR-28-0143

There are two (2) items for which the Department is soliciting public comments:



1. Draft Public Involvement Plan (PIP) – Comments pertaining to the February 2024 Draft PIP may be submitted to the Department until 4:00 pm on December 19, 2024. All comments must be made in writing, as detailed below. To view the Draft PIP, scan the QR Code to the left of this paragraph.
2. Post-Site Investigation (in accordance with Section 1.8.9(A) of § 250-RICR-140-30-1, the Remediation Regulations) – Comments regarding the technical feasibility of the proposed remedial alternative may be submitted to the Department until 4:00 pm on December 23, 2024. The preferred remedial alternative proposes to encapsulate site soils through the construction of a cap designed in consultation with a licensed Professional Structural Engineer to:
 - a. Eliminate direct exposure to Site soils;
 - b. Prevent the migration of soils from the Site; and
 - c. Prohibit the infiltration of stormwater through Site soils.

Additional details about the proposed remedy and where to find more information are on the back.

All public comments must be submitted in writing, either by email to ashley.blauvelt@dem.ri.gov or by mail or drop off to Rhode Island Department of Environmental Management, Attn: Ashley Blauvelt, 235 Promenade Street, Providence, RI 02908.

RIRM – Proposed Conceptual Remedy

- The encapsulation of all site soils such that:
 - direct exposure to jurisdictional soils is eliminated;
 - site soils cannot leave the site through wind, stormwater, or vehicle traffic; and
 - infiltration of stormwater through site soils is prevented.

The specifications (materials, design, thickness, etc.) shall be determined in consultation with a Rhode Island registered Professional Engineer specializing in structural engineering. The structural engineer must provide recommended site-specific encapsulation specifications for a site-wide impervious cap(s) that will provide the above protections and withstand the machinery, loads, and daily traffic and operations for as many years practicable. In addition, erosion due to the coastal location of the property must be considered as part of the cap design. The encapsulation specifications shall be submitted for Department review as part of the Remedial Action Work Plan (RAWP). The cap design shall be subject to review by the Rhode Island Coastal Resources Management Council (RI CRMC) and the Department's Office of Water Resources (OWR).

- The maintenance and monitoring of the engineered controls through the recording of an institutional control in the form of a Department approved Environmental Land Usage Restriction (ELUR). The ELUR shall be recorded on the deed for the entire property (Plat Map 47 / Lot 601 and Plat Map 55 / Lot 10). The ELUR shall require the performance of annual inspections to document the status of the ELUR and the condition of the engineered controls. The ELUR shall also include a Department-approved post remediation soil management plan (SMP) which will address any future activities that may disturb on-Site soils. The ELUR shall be recorded for the entire Property in the Land Evidence Records for the City of Providence.

The documents from the Site Remediation file for RIRM that contain the information most helpful in considering the proposed remedial approach to address the environmental concerns characterized in the environmental site investigation include the following:

- 2023 December 12 – [Site Investigation Report \(SIR\)](#)
- 2024 January 12 – [Response to RIDEM SIR Comments](#)
- 2024 April 1 – [RIRM Proposed Conceptual Remedy](#)
- 2024 May 21 – [Meeting Summary for May 9, 2024](#)
- 2024 June 17 – [SIR Addendum – Post-Fire Sampling](#)
- 2024 July 11 – [RIRM Response to Remedy Comments](#)
- 2024 August 23 – [Remedial Design Comment Letter](#)
- 2024 August 29 – [Remedial Design Comment Response](#)
- 2024 September 11 – [Remedial Design Comment Letter Clarification](#)
- 2024 September 20 – [Remedial Design Comment Response 2](#), and;
- 2024 October 8 – [Program Letter](#) (halfway down page 3).



The entire Site Remediation file for RIRM, including the listed documents, can be found on the Department's website at <https://dem.ri.gov/node/2287>

All public comments must be made in writing.

To submit public comments:

- Email to ashley.blauvelt@dem.ri.gov or
- Mail to / Drop-off at RIDEM Headquarters, Attn: Ashley Blauvelt, 235 Promenade Street, Providence, RI 02908.

Lab Analyses:

Analysis	Definition	Description	Source
TPH	Total Petroleum Hydrocarbons	TPH are a summation of the identifiable compounds related to oil within a sample of environmental media.	EPA, paraphrased
VOCs	Volatile Organic Compounds	[VOCs] are compounds that have a high vapor pressure and low water solubility. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, pharmaceuticals, and refrigerants.	EPA
SVOCs	Semi-Volatile Organic Compounds	SVOCs are more likely [than VOCs] to be liquids or solids at lower temperatures. Some examples of products that include SVOCs are many pesticides, oil-based products, and fire retardants.	EPA
PAHs	Polycyclic Aromatic Hydrocarbons	[PAHs] are a class of chemicals that occur naturally in coal, crude oil, and gasoline. They are also produced when coal, oil, gas, wood, garbage, and tobacco are burned.	CDC
PCBs	Polychlorinated Biphenyls	PCBs are a group of man-made organic chemicals consisting of carbon, hydrogen and chlorine atoms. PCBs were used in hundreds of industrial and commercial applications including hydraulic equipment, plasticizers, and pigments.	EPA
PP13 Metals	Priority Pollutant 13 Metals,	Priority Pollutant 13 Metals are included in the EPA's list of Priority Pollutants. The PP13 Metals, specifically, are typically found in wastewater.	EPA

Regulatory Criteria:

Criteria	Definition	Description	Source
R-DEC	Residential Direct Exposure Criteria	Criteria regulating properties participating in residential activity, which is defined as: “... any activity related to a residence or dwelling, including but not limited to a house, apartment, or condominium, or a school, daycare, playground, or Recreational Facility for Public Use.”	RIDEM
I/C-DEC	Industrial/ Commercial Direct Exposure Criteria	Criteria regulating properties participating in commercial/industrial activity, which is defined as: “...any activity related to the commercial production, distribution, manufacture or sale of goods or services, or any other activity which is not a traditional Residential Activity as defined by § 1.4(A)(68) of this Part including activities related to outdoor recreational areas with restrictions in place to limit potential exposure.”	RIDEM
GB-LC	GB Leachability Criteria	The concentration of a specific Hazardous Substance above which there exists the potential for said Hazardous Substance to be transported, in part, from soil and into groundwater and/or surface water, potentially increasing the concentration of the Hazardous Substance in groundwater to a concentration that exceeds the applicable GB Groundwater Criteria.	RIDEM, paraphrased
GB-GWO	GB Groundwater Objectives	Groundwater classified GB shall be those groundwater resources designated by the Director which may not be suitable for public or private drinking water use without treatment due to known or presumed degradation.	RIDEM

Rhode Island Recycled Metals Fact Sheet – SIR Results Summary

Site Location: RIRM facility, 434 Allens Avenue. Providence, RI

Site
Location



SIR Results Summary

- SIR was submitted to RIDEM on December 12, 2023. It was determined that the previous cap was no longer viable and that polychlorinated biphenyls (PCBs), metals, total petroleum hydrocarbons (TPH) and semi-volatile organic compounds (SVOCs) should be included as contaminants of concern for Site soils, and volatile organic compounds (VOCs), PCBs, and TPH should be included as contaminants of concern for Site groundwater.
 - Eighteen (18) soil boring samples were collected from the Site from nine different locations. Four (4) samples were collected from the soil stockpiles present on the eastern portion of the Site. Twelve (12) surficial soil samples were collected from the Site. Three (3) groundwater monitoring wells were installed at the Site, and samples were collected from each. In total, 34 soil samples and 3 groundwater samples were collected from the Site as part of the SIR.
- An SIR Addendum in the form of a Response to RIDEM Comments was submitted on January 12, 2024
- Samples were collected from the Site following a fire for VOCs, SVOCs, and TPH, and the SIR Addendum – Post Fire Sampling report was submitted to RIDEM on June 11, 2024
 - Nine (9) samples were collected from surficial soil believed by the Department to potentially be impacted by the fire
- RIDEM issued a Program Letter on October 8, 2024 approving the proposed remedies of encapsulation of Site soils and an Environmental Land Use Restriction for the Site

Known Contaminants

- The contaminants detected in soil include TPH, SVOCs, arsenic, and lead at levels which exceed RIDEM's Direct Exposure Criteria (DEC).
- Neither VOCs, PCBs, nor TPH were detected in Site groundwater at concentrations exceeding GB Groundwater Objectives.

Project Plan

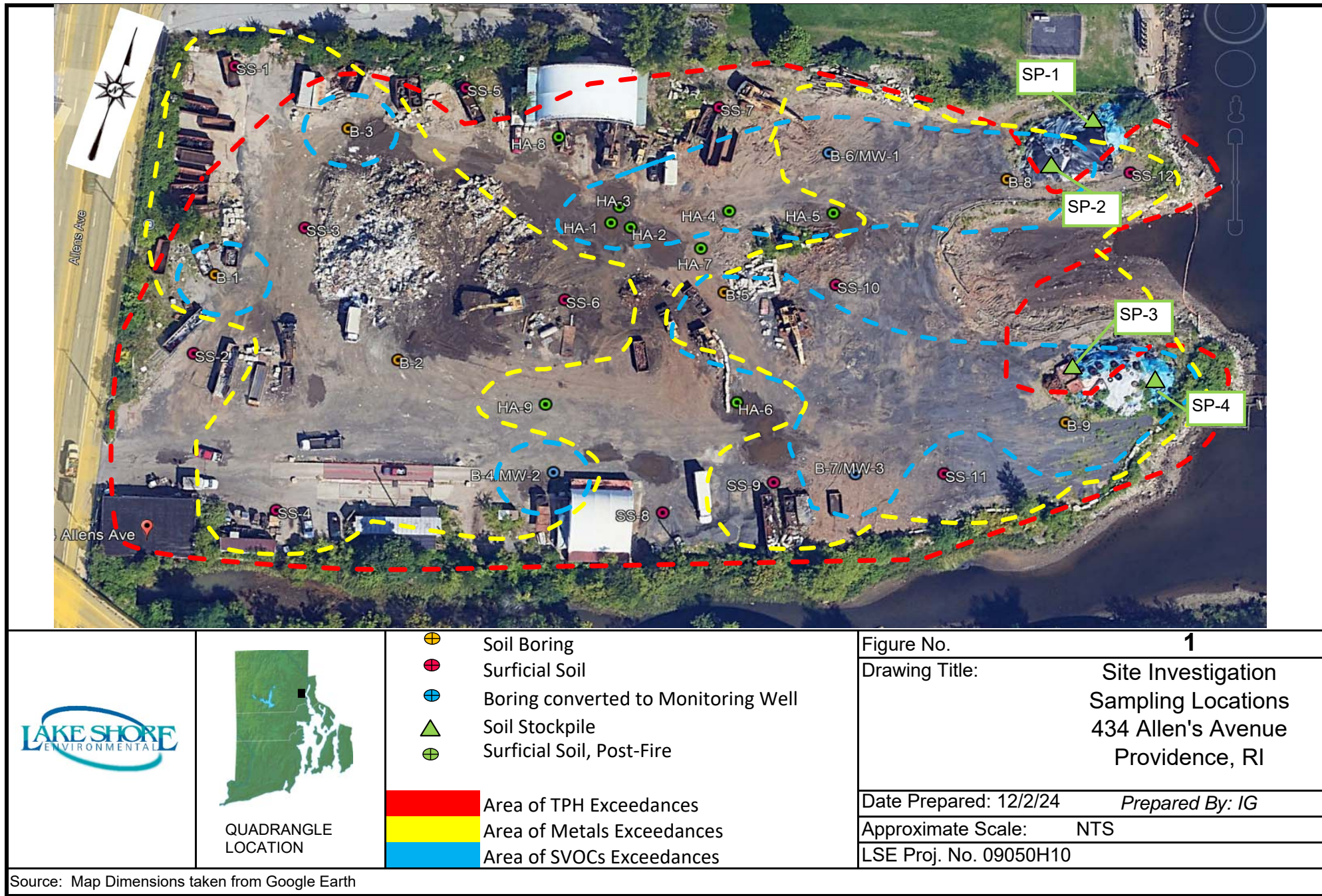
- Following the completion of the public comment period and receipt of a Remedial Decision Letter, the Remedial Action Work Plan (RAWP) will be submitted for RIDEM review. Following approval, remediation of the Site will commence.

Contact Information:

Ms. Ashley Blauvelt, Environmental Engineer IV
RIDEM – Office of Land Revitalization and Sustainable Materials Management
Site Remediation Program
(401) 537-4309
Ashley.Blauvelt@dem.ri.gov

The Site Remediation File is available for review online via this link or the QR code:
<https://dem.ri.gov/node/22871>

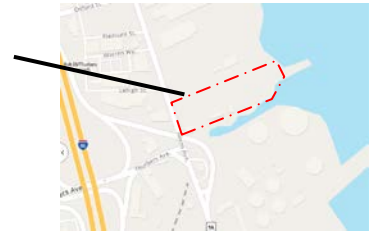




Rhode Island Recycled Metals Fact Sheet – Proposed Conceptual Remedy

Site Location: RIRM facility, 434 Allens Avenue. Providence, RI

Site
Location



Proposed Remedy

1. The encapsulation of all Site soils such that:
 - Direct exposure to jurisdictional soils is eliminated;
 - Site soils cannot leave the Site through wind, stormwater, or vehicle traffic; and
 - Infiltration of stormwater through Site soils is prevented.

The specifications of the cap shall be determined in consultation with a Rhode Island registered Professional Engineer specializing in structural engineering. The cap design shall be subject to review by the Rhode Island Coastal Resource Management Council (RI CRMC) and the Department's Office of Water Resources (OWR).

EPA defines encapsulation, or “capping” as the following:

Capping involves placing a cover over contaminated material such as landfill waste or contaminated soil. Such covers are called “caps.” Caps do not destroy or remove contaminants. Instead, they isolate them and keep them in place to avoid the spread of contamination. Caps also prevent people and wildlife from coming in contact with contaminants.

2. The maintenance and monitoring of the engineered controls through the recording of a Department-approved Environmental Land Use Restriction (ELUR). The ELUR shall:
 - Require the performance of annual inspections to document the status of the ELUR and the condition of the engineered controls (the cap);
 - Include a Department-Approved post remediation soil management plan (SMP), which will address any future activities that may disturb on-Site soils.

The ELUR shall be recorded for the entire Property in the Land Evidence Records for the City of Providence.

Public Comment Period

In accordance with §1.8.9(B) of 250-RICR-140-30-1, the Remediation Regulations, the public comments period regarding the technical feasibility of the proposed remedy is currently open. All comments must be submitted in writing to the contact below (via email or mail) by 4:00 pm on December 23, 2024

Contact Information:

Ms. Ashley Blauvelt, Environmental Engineer IV
RIDEM – Office of Land Revitalization and Sustainable Materials Management
Site Remediation Program
(401) 537-4309

Ashley.Blauvelt@dem.ri.gov

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Community Guide to Capping



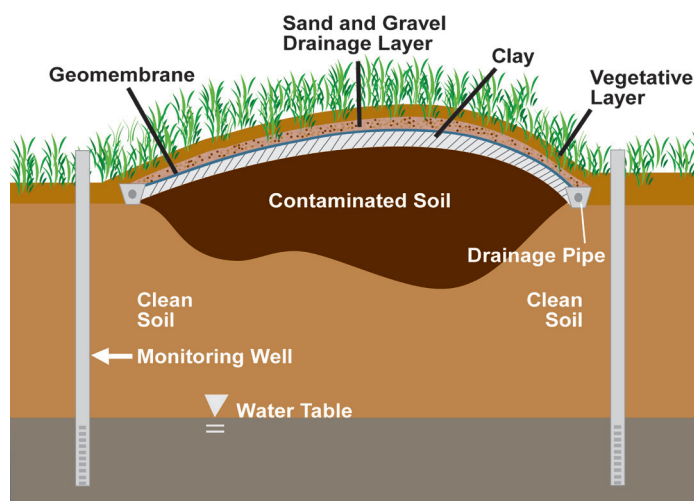
What Is Capping?

Capping involves placing a cover over contaminated material such as landfill waste or contaminated soil. Such covers are called “caps.” Caps do not destroy or remove contaminants. Instead, they isolate them and keep them in place to avoid the spread of contamination. Caps also prevent people and wildlife from coming in contact with contaminants.

How Does It Work?

A cap isolates and prevents the spread of contamination in several ways. For example, it can:

- Stop rain and snowmelt from seeping through the material and carrying contaminants to the groundwater.
- Keep stormwater runoff from carrying contaminated material offsite or into lakes and streams.
- Prevent wind from blowing contaminated material offsite.
- Control releases of gas from wastes containing or producing “volatile” chemicals (those that evaporate).



Example of a cap with several layers.

- Keep people and wildlife from coming into contact with the hazardous material and tracking contaminants offsite.

The cap design selected for a site will depend on several factors, including the types and concentrations of contaminants present, the size of the site, the amount of rainfall the area receives, and the future use of the property. One or more layers may be needed. For example, an asphalt cap might be selected to cover low levels of soil contamination on a property whose future reuse requires a parking lot. A cap for a hazardous waste landfill, however, might require several layers, including a vegetative layer, drainage layer, geomembrane and clay layer to ensure water is kept out of the waste. Here are some types of cap layers:

- **Asphalt or concrete:** A surface layer of these materials can serve as a cap and a parking lot or building slab foundation.
- **Vegetative layer:** A top layer of soil planted with grass or other vegetation can help prevent soil erosion and make the area look more natural and attractive. An evapotranspiration or “ET” cover is a vegetative cap in which the plants and underlying soil keep rain and snowmelt from soaking down into the contaminated area. (See [Community Guide to Evapotranspiration Covers](#).)
- **Drainage layer:** A layer of sand and gravel, often containing rows of slotted pipes, collects and drains any water that makes it through the top layers of a cap.
- **Geomembrane:** A sheet of strong plastic-like material prevents downward drainage of water and upward escape of gases.
- **Clay:** A layer of compacted clay helps prevent the downward drainage of water.

Some landfill covers, such as those for municipal landfills, also may include collection and venting systems for methane and other gases that could build up underground.

How Long Will It Take?

Building a cap can take a few days or up to several months. The construction time will depend on several factors that vary from site to site. For example, capping will take longer where:

- The contaminated area is large.
- The design of the cap is thick or complex.
- Supplies of clean topsoil, clay or other cap materials are not available locally.

Caps can be effective for many years when they are properly maintained. They are maintained for as long as the contaminated materials remain in place.

Is Capping Safe?

When properly built and maintained, a cap can safely keep contaminated material in place. A cap will isolate contamination as long as it does not erode or develop cracks or holes that allow water to reach the contaminated material. Any cracks or holes must be repaired so the cap continues to be effective. Regular inspections ensure that weather, plant roots and human activity have not damaged the cap and that plants on vegetative caps are still growing. Typically, groundwater monitoring wells are placed around the capped area and sampled to detect leaks.

How Might It Affect Me?

You may notice increased truck traffic as cap materials come to the site. You also might hear bulldozers, backhoes and other equipment during construction of the cap or see stockpiles of soil for use in the cap. The capped area may be fenced off to prevent entry.

Why Use Capping?

Capping is the traditional method for isolating landfill wastes and contaminants. It sometimes is used to address large volumes of soil or waste with low levels of contamination. Caps made of asphalt or concrete, or even a layer of soil planted with grass, can allow some sites to be reused. Caps have been selected for use on hundreds of Superfund sites and other cleanup sites across the country.



Spring grasses grow on the cap of a hazardous waste landfill.

NOTE: This fact sheet is intended solely as general information to the public. It is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States, or to endorse the use of products or services provided by specific vendors.

Example

Capping is one of several methods used to protect people and the environment from contamination at the Roebbling Steel Superfund site in New Jersey. Drums and other wastes were removed from a 5-acre area of the site. Some of the soil remaining after the excavation contained metals and other contaminants from steel manufacturing. In 2005, this soil was covered with two types of caps: asphalt and clean soil planted with grass. The purpose of these caps was to prevent the spread of contaminants and to keep people from coming into contact with contaminated soil.

The caps also were designed with the future use of the site in mind. A station for New Jersey's light rail system was constructed on the property, and the asphalt cap serves as its parking lot. Grassy landscaping surrounds the rest of the property. A plan is in place for the long-term maintenance and monitoring of the caps to ensure that they remain protective. Future excavation through the soil cap is not permitted.

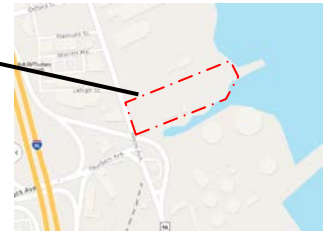
For More Information

- About this and other technologies in the Community Guide Series, visit: <https://clu-in.org/cguides> or <https://clu-in.org/remediation/>
- About use of cleanup technologies at a Superfund site in your community, contact the site's community involvement coordinator or remedial project manager. Select the site name from the list or map at <http://www.epa.gov/superfund/sites> to view their contact information.

Rhode Island Recycled Metals Fact Sheet – Contaminant Control Plans

Site Location: RIRM facility, 434 Allens Avenue, Providence, RI

Site
Location



Operating Procedures Implemented by RIRM to Minimize Dust/Runoff:

- Implementation of infrared technology and heat notification systems, with 24/7 monitoring of these systems
- Deployment of fire suppression controls consisting of both water and foam around the Site
- Personnel safety training, including OSHA requirements and materials inspection to limited improper disposal by customers
- Installation of ground-asphalt berms and hay socks to prevent stormwater runoff into the Providence River
 - a. The Stormwater Permit Application is in progress and a DEM-approved Stormwater Management System will be installed.
- Performance of air monitoring on personnel
- Presence of in-place berms to minimize water flow beyond Site footprint, during rain events
- Reduced scrap pile size by utilizing 2 separate drop areas and increasing frequency of pick-ups
- Reduced operating footprint and general Site improvements to reduce potential for dust and Site deterioration
- Maintenance of covers on soil piles
- Facility management restricting public access to only drop-off areas and trailer window
- Periodic safety reviews by an independent safety consultant

Contact Information:

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RIRM Public Meeting II

12.03.24

PRESENTATOR: Lake Shore Environmental

Meeting Agenda

1. Site updates (both project- and facility-related) since previous PIP Public Meeting
2. SIR results
3. Proposed Remedy
4. Upcoming Dates
5. Q/A

Site Updates

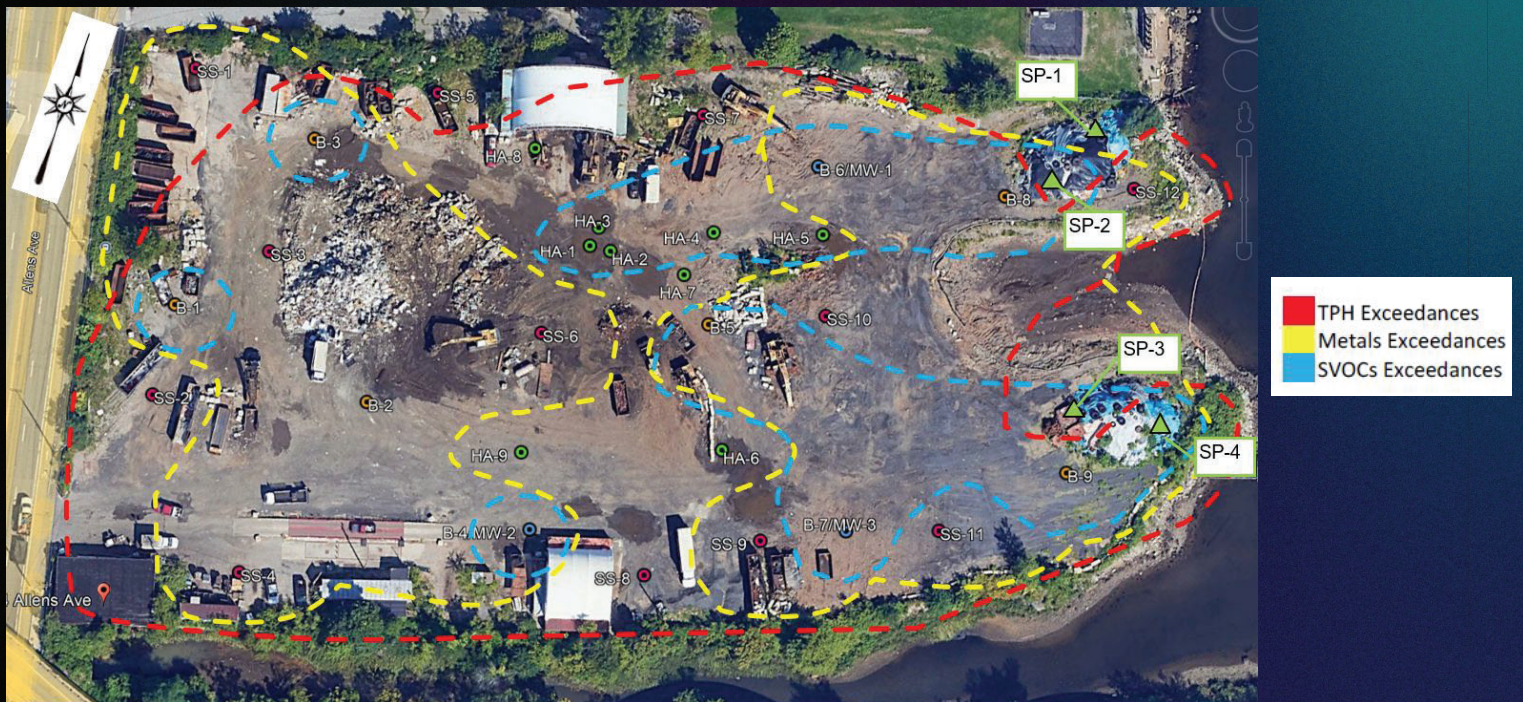
Project Updates

- October 8th, 2024: RIDEM issued Program Letter
- November 1st, 2024: Post-SIR Public Notice was issued to members of mailing list

Facility Updates

- Performance of air monitoring on Site personnel using dust capture
- Installation of fire suppression controls consisting of both water and foam
- Implementation of infrared technology and heat notification systems, monitored 24/7

Review SIR Results



Proposed Remedy

- Encapsulation of Entire Site
- Deed Restriction (ELUR) that applies to entire Site

[Community Guide to Capping](#) (EPA)

What Is Capping?

Capping involves placing a cover over contaminated material such as landfill waste or contaminated soil. Such covers are called "caps." Caps do not destroy or remove contaminants. Instead, they isolate them and keep them in place to avoid the spread of contamination. Caps also prevent people and wildlife from coming in contact with contaminants.

How Does It Work?

A cap isolates and prevents the spread of contamination in several ways. For example, it can:

- Stop rain and snowmelt from seeping through the material and carrying contaminants to the groundwater.
- Keep stormwater runoff from carrying contaminated material offsite or into lakes and streams.
- Prevent wind from blowing contaminated material offsite.

Upcoming Dates

- PIP Comment Deadline: **December 19, 2024**
- Post-SIR Comment Deadline: **December 23, 2024**

Please submit all comments in writing (by email or mail) to Ashley Blauvelt.

Ashley Blauvelt, Environmental Engineer IV

RIDEM - Office of Land Revitalization and Sustainable Materials Management

235 Promenade Street, Providence, RI

Ashley.Blauvelt@dem.ri.gov