



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 Post Office Square, Suite 100
Boston, MA 02109-3912

DATE: August 8, 2019

SUBJ: Site Investigation Closure Memorandum
Gallows Hill Site
Salem, MA 01970

FROM: James Carew, On-Scene Coordinator
Emergency Response and Removal Section I

A handwritten signature in black ink, appearing to read "James Carew", is written over the printed name and title.

THRU: Edward J. Bazenas, Chief
Emergency Response and Removal Section I

Handwritten initials "EJB" in black ink, written over the printed name.

TO: Gallows Hill Site File

In accordance with section 300.410 of the National Contingency Plan (NCP), a Removal Site Evaluation, consisting of a Preliminary Assessment and Site Investigation (PA/SI), has been undertaken at the Gallows Hill Site ("Site") in Salem, MA. The findings of the Removal Site Evaluation have been evaluated under the criteria set forth in section 300.415 of the NCP, section 104(a) and (b) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 U.S.C. ' 9604(a) and (b) and Clean Water Act (CWA) ' 311(c)(i) as amended by the Oil Pollution Act (OPA) ' 4201(a). The Removal Site Evaluation has led to the determination that a Removal Action is appropriate at this time.

The findings of the Removal Site Evaluation are outlined below.

1. Source and nature of the release or threat of release
 - a. The Removal Site Evaluation consisted of the following actions:
 - i. Review of analytical results generated by EPA's Superfund Technical Assessment and Response Team (START) as part of an EPA Preliminary Assessment / Site Investigation (PA/SI). These consist of both field screening and laboratory analysis provided by EPA's Region 1 New England Regional Laboratory (NERL).
 - ii. Massachusetts Department of Environmental Protection (MassDEP) data package submitted March 6, 2019 to US EPA from Erik Johnson. Package includes historical maps, aerial images of Gallows Hill Site project

boundaries, historical photographs and data.

- iii. Review of ESS Laboratory Report entitled "MassDEP Langdon Street Salem MA" ESS Laboratory Work Order Number: 1902495. Prepared for MassDEP by ESS Laboratories and dated March 5, 2019.
 - iv. Interviews and discussions with residents of Langdon Street prior to and during the Site Investigation completed in May of 2019.
 - v. Multiple on-site meetings held prior to May 2019 PA/SI with representatives from MassDEP, City of Salem and consultant Tighe and Bond to discuss project scope and Site history.
- b. Based on the information available at this time, the principal hazardous substances or pollutants or contaminants that are being released or for which there is threat of release include but are not necessarily limited to the list below.

Hazardous Substances or

Pollutants or Contaminants

Media

Arsenic

Soil

2. Evaluation of the threat to public health, welfare and the environment

- a. Federal Agency for Toxic Substances and Disease Registry:

Threat ☐

No Threat ☐

Evaluation Not Necessary ☒

- b. Endangerment to the ecosystem:

Threat ☐

No Threat ☐

Evaluation Not Necessary ☒

3. The Removal Site Evaluation was terminated pursuant to section 300.410(f) of the NCP for the following reason(s).

- ☐ There is no release.
- ☐ The source is neither a "vessel" nor a "facility" as defined in section 300.5 of the NCP.
- ☐ The release involves neither a hazardous substance, nor a pollutant or contaminant that may present an imminent and substantial danger to public health or welfare of the United States.

- ☐ It is subject to the limitations on response specified in 300.400(b)(1) through (3). The release is
 - ☐ of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found.
 - ☐ from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures.
 - ☐ into public or private drinking water supplies due to deterioration of the system through ordinary use.
- ☐ The amount, quantity, or concentration released does not warrant a Federal response.
- ☐ A party responsible for the release, or any other person, is providing appropriate response, and on-scene monitoring by EPA is not required.
- ☒ The Removal Site Evaluation is complete.

4. As reflected in Section 2 above, the Removal Site Evaluation was terminated due to its completion, and not for other reasons.

- a. The factors listed below, found in Section 300.415(b)(2) of the NCP, are applicable to this Site.
 - ☒ Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.
 - ☐ Actual or potential contamination of drinking water supplies or sensitive ecosystems.
 - ☐ Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
 - ☒ High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.

- ☒ Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- ☐ Threat of fire or explosion.
- ☒ The availability of other appropriate Federal or State response mechanisms to respond to the release.
- ☐ Other situations or factors that may pose threats to public health or welfare of the United States or the environment.

b. In light of the magnitude of the threat or potential threat to health, welfare, or the environment, the appropriate categorization of a Removal Action at this Site is:

Emergency ☐ Time-Critical ☒ Non Time-Critical ☐

From May 29-30, 2019, the EPA OSC and contractor personnel mobilized to the Site to conduct the SI. A total of 118 soil samples from 41 borings from 0-3 feet below ground surface were taken and analyzed for metals. Sample results identified elevated levels of arsenic in soil above the EPA Removal Management Level (RML) of 68 mg/kg of arsenic in residential soil at three of the seven residential properties investigated.

A Site Review Meeting was held on August 8, 2019. The Site team concurred with the recommendation to conduct a Removal Action at the three residential properties with arsenic in surface soil above EPA's RML.

5. As reflected in Section 3, above, the Removal Site Evaluation was terminated due to its completion, and not for other reasons.

a. As found in section 300.410(e)(1) of the NCP, the OSC shall determine whether a release governed by CWA section 311(c)(1), as amended by OPA section 4201(a), has occurred.

☐ There is a release, or potential threat of release, as governed by the CWA as amended by OPA.

☒ There is not a release, or potential threat of release, as governed by the CWA as amended by OPA.

b. The absence of the conditions specified in Section 4.a., above, indicate that an Oil Spill Response under Appendix E to Part 300 of the NCP is not necessary. This action will be conducted under CERCLA to address arsenic contamination in residential soil.

cc: Edward J. Bzenas, Chief, Emergency Response and Removal Section I, SEMD
Meghan Cassidy, Chief, Remedial Policy, Contracts & Site Assessment Section, SEMD
Patti Ludwig, EPRB, SEMD
Cosmo Caterino, EPRB, SEMD
Erik Johnson, MassDEP

Encl: PA/SI Report for the Gallows Hill Site, Salem, MA dated August 2019