



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

Mr. Paul V. Rosasco
Project Coordinator
Engineering Management Support, Inc.
25923 Gateway Drive
Golden, Colorado 80401

Dear Mr. Rosasco:

The U.S. Environmental Protection Agency has completed its review of the Project Safety, Health, and Environmental Plan (PSHEP) for the West Lake Landfill, OU-1 Remedial Design, March 30, 2020 and the Radiation Safety Plan (RSP) for Operable Unit-1, March 30, 2020 . Enclosed are the EPA's comments on these documents, which were submitted on March 30, 2020.

The EPA does not officially approve health and safety plans which are regulated under the OSHA but believes that addressing these site-specific comments will improve the protectiveness and usability of these documents. Please address these comments and submit the revised PSHEP and RSP to the EPA at least 14 days prior to initiation of the field work, unless otherwise approved.

Please feel free to contact me with any questions or concerns by phone at (913) 551-7141 or by email at jump.chris@epa.gov.

Sincerely,

Christine R. Jump
Remedial Project Manager
Site Remediation Branch
Superfund and Emergency Management Division

Enclosures



**Comments on OU-1 Remedial Design Project Safety, Health, And
Environmental Plan (PSHEP), March 30, 2020**

1. **General Comment.** The PSHEP is thorough; however, it is difficult to quickly identify the critical site-specific, day-to-day information that will be used by workers on site. The EPA recommends that a “Quick Reference Guide” be developed for this PSHEP that includes a list of key information, (e.g. such as route to the hospital, Job Safety Analyses (JSAs), phone numbers) with page numbers where that information can be found.
2. **Table of Contents.**
 - a. There is an extra Appendix B listed at the end of the Table of Contents that is a duplicate of the one above. Delete.
 - b. Feezor is misspelled in the listing for Appendix F.
3. **PSHEP Authority, page 3 and Appendices.** There does not appear to be a site-specific safety, health, and environmental plan (SSHEP) for the drilling contractor(s). Add the SSHEP for any drilling contractor (or for any other contractor/subcontractors) as an additional appendix to this PSHEP. The SSHEP for any drilling contractor shall be provided to the EPA at least 14 days prior to the start of field work involving drilling.
4. **Organizational Structure, page 3-4.** This section states, “The site safety organization is structured so that field personnel report to the Site Health and Safety Officer (SHSO) who, in turn, reports to the Project Health and Safety Manager for safety-related issues.” This document does not identify the SHSO and does not list this position in the Project Organization Chart or the Key Stakeholder list. Revise this document as appropriate.
5. **Risk Register, First Paragraph, page 5.** Add that any additional policies, procedures, etc. to control the risk of project activities will also be *documented*, in addition to being developed, communicated, monitored, and adjusted.
6. **Emergencies and Emergency Management, page 9.** This section lists nearby hospitals and urgent care facilities but does not specify one to use in an emergency and does not provide a route to the hospital. Provide this information in the document and in the Quick Reference Guide requested above.
7. **Feezor SSHEP, page 8 and Ameriphysics SSHEP, page 8.** The bottom of the page states that Activity Hazard Analysis (AHA) and other risk management processes are described in Section 10 and included in this SSHEP. Sections are not designated in this SSHEP. Clarify what the reference to Section 10 is referring to.
8. **Appendix C, Job Step 3, Soil Sampling.**
 - a. This step does not include opening cores, relocating cores, logging cores, or packing samples. There is insufficient detail in the OU-1 Field Sampling Plan (FSP) to determine whether this AHA and the associated JSAs in the SSHEP need to be revised with additional information. The EPA recommends sample collection and core logging be evaluated separately and a unique AHA (and JSA) be developed with greater attention to

the steps or tasks involved. More detail is needed to evaluate the hazards associated with different sampling media, e.g. soil, sediment, waste, etc.

- b. Section 2.2 of the (FSP) for the DIWP states, “Radiologically impacted soils generated during drilling and sampling operations will be archived and stored at an onsite lay-down area for potential sampling.” An additional AHA or (JSA may be necessary related to this archiving and future accessing of archived cores; however, there is insufficient information in the draft FSP or the PSHEP to make that determination. Revise the PSHEP as necessary to include safety considerations for any changed procedures described in the second draft of the FSP in response to the EPA’s comments on that document.
9. **Appendix C.** There is no AHA for drilling borings or setting casing in borings. Add an AHA for drilling activities to the PSHEP. This information shall be provided to the EPA 14 days prior to initiating drilling.
 10. **Appendix C.** There is no AHA for down-hole gamma logging activities. Each separate activity should have an AHA. Parsons has verbally discussed having a separate team, in part due to COVID -19 social distancing concerns, performing down-hole logging activities. Therefore, the EPA recommends developing an AHA for down-hole logging and any associated tasks or steps that will be performed by this team to address these hazards.
 11. **Appendix F – SSHEP Feezor and Appendix G –SSHEP Ameriphysics,**
 - a. The JSAs in these appendices either state to” Make note of evacuation route and route to hospital” or the “Evac route and directions to hospital have been provided.” Update these JSAs and the PSHAP to indicate where the Evacuation Route and directions to the hospital are provided.
 - b. JSA for Soil and Flora sampling. Revise this JSA by adding geological logging to the job. Evaluate whether other updates are necessary in accordance with comment 8 above, such as discussion of cutting open core sleeves as a potential hazard and addressing any associated airborne exposure potential.
 - c. JSA for drilling, casing/element installation - include appropriate monitoring of the breathing space in the mitigation column.
 - d. JSA for well abandonment activities –include appropriate monitoring of the breathing space in the mitigation column.
 - e. There is no JSA for the activity of down-hole gamma logging or core gamma logging in the Feezor or Ameriphysics SSHEP. Add an appropriate JSA.
 12. **Appendix H-3, Attachment 1.** The information provided in this attachment is very general. Please add site specific precautions that will be taken or are required on-site with regards to COVID-19 in an update to this attachment or elsewhere in the PSHEP

Comments on Radiation Safety Plan for Operable Unit-1, March 30, 2020

13. **Section 4, pages 8-9 and Section 5.3, pages 11-12.** The discussion in Section 4 related to the radiological contaminants of concern does include all the radiological contaminants of concern for the Site and appropriately references Table 1 from the 2018 Record of Decision Amendment (RODA). However, some additional discussion is needed about the nature of the contamination

and the specific radionuclides that are most likely to be encountered. Section 7.1.1 of the RODA provides a summary description of the nature of the contamination which describes the prevalence of Th-230 compared to the other radionuclides of concern. Additional details are provided in Section 6 of the Remedial Investigation Addendum. This information should be included in the RSP to assist with implementation of monitoring and evaluation of any engineering controls and/or personal protective equipment usage.

14. **Section 5.3, page 12, last paragraph in the section.** The last sentence of the paragraph states, “The RSO will be consulted to establish appropriate controls and protections if airborne concentrations exceeding 10% of the DAC are encountered.” Since the most restrictive DAC listed in Table 3 for Ac-227 and Bi-211 from the U-235 decay series are relatively low, and the expectation that activity from naturally occurring background will be collected on air monitoring filters, the EPA anticipates it will be highly likely that one or more air monitoring samples will exceed 10% of the DAC. Given the likelihood for this situation to occur, this paragraph/section must be expanded to include a discussion of the potential “appropriate controls and protections” that will be considered as needed. This discussion should also build upon the summary of the nature of the contamination at the site discussed in the prior comment, the likelihood to encounter any radionuclides in the U-235 decay series, and the likelihood to encounter certain radionuclides from the U-238 decay series. A general description of how the air monitoring results will be evaluated to determine whether additional controls and protections will be needed should also be included, such as laboratory analysis of air monitoring samples, if appropriate.