Response to EPA Comments on July 2, 2019 Emergency Response Plan
West Lake Superfund Site Operable Unit 1

1. Introduction, page 1. In the sentence in the third paragraph, add the phrase, "if approved by EPA" after, "This ERP may be revised a necessary".

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

2. Emergency Response Roles and Responsibilities, page 4. Add the Role of the "Support Contacts" from Table 1 to this section.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

3. Plan Development and Revisions, page 5.

a. This section states that the Emergency Response Plan, or ERP, was developed based in part on the current Incident Management Plan, or IMP, and then goes on to discuss how the IMP was developed and how it is revised. Make revisions such that the discussion is focused more on the ERP and includes discussion of remedial action activities in addition to remedial design activities that could potentially impact the actions of emergency responders.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

b. Paragraph four discusses OU-1 personnel still attending quarterly IMP meetings "when possible". Remove discussion of IMP meetings and revised this paragraph to discuss OU-1 ERP meetings, which should be regularly attended by OU-1 personnel. Include information about the frequency and location of ERP meetings and individuals or agencies that will be invited or expected to attend. This section should include a provision for notes from the ERP meetings to be compiled and distributed to invitees. Note that ERP and IMP meetings may occur consecutively for attendees needing to attend both.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

c. Please clarify when the ERP will be submitted to authorities listed in Table 1. Indicate how and when comments will be requested from local authorities and emergency responders and which site personnel will be responsible for coordinating with authorities regarding comments or the need for additional meetings.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

d. Expand the discussion regarding the revision or amendment process in this section to include more specific information about when and why the ERP will be revised and the process that will be used for proposing and approving revisions or amendments to this plan, similar to that on page 20 of the IMP.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

4. Emergency Assessment Response Strategy, page 6.

a. Revise this section to include a discussion of how the Emergency Response Manager, or ERM, will be notified of a potential emergency event. Include information such as whether landfill facility personnel (OU-1 or others) have been educated as to when and how to notify the ERM, whether the appropriate contact information is listed in existing and future Health and Safety Plans, whether local authorities have been informed whom to notify, or whether there are placards on the perimeter fence to indicate whom to contact in an emergency.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

b. Discuss whether there will be OU-1 specific or other staff at the West Lake Landfill property 24/7 during remedial design (RD) and/or remedial action (RA). Also discuss how coordination may occur with on-site landfill personnel during an emergency event. Specify whether the facility has staff "on call" in case of emergencies.

Response: *Currently, there are no waste disposal activities occurring within OU-1. Workers only enter OU-1 to perform routine inspection and maintenance activities (e.g., inspection of the NCC). As such, there are no dedicated OU-1-specific personnel present on the West Lake Landfill Superfund Site property 24/7. It is anticipated that OU-1 will be staffed by on-site personnel during the RD phase of the project during normal business hours only, as field activities within OU-1 during RD (e.g., investigative borings) will be relatively short in duration and confined to normal business hours. It is anticipated that changes to OU-1 on-site staffing needs during the RA phase of the project will be addressed when the ERP is updated concurrently with the submittal of the Per-Final (90%) Remedial Design (90% RD) (SOW Deliverable #21) and Operation & Maintenance Plan (OM&M Plan) (SOW Deliverable #18), per SOW Paragraph 3.8(b).*

The text of the ERP has been revised to clarify the procedures for coordination with Bridgeton Landfill personnel during an emergency event, and to clarify that the OU-1 Emergency Response Manager (or their Alternate) will be on-call 24/7 throughout the RD and RA phases of the project.

c. Clarify whether the ERM will perform the initial emergency assessment from on-site, and if not, discuss how this person will receive the information to perform the assessment. Indicate when and who will mobilize to the site to evaluate the emergency and the response and, if necessary, coordinate with emergency responders or incident commanders.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

5. Emergency Response Infrastructure and Equipment, page 8.

a. Second Paragraph – Figure 3 appears to show a bulk storage Frac Tank within the Area 1 fence. Revise the text or figure, accordingly.

Response: *The referenced frac tank will be emptied and cleaned in the fourth quarter 2019. The tank may be retained or removed from OU-1 Area 1 in the near term, depending on the facility's needs. If the tank is removed, Figure 3 will be updated when new aerial imagery is available.*

b. Site Entrances, first paragraph – Figure 3 also shows a 20-ft gate (S.E.) in Area 1 along St. Charles Rock Road that is not discussed in the text. Resolve this discrepancy between the text and Figure 3.

Response: *As illustrated on Figure 3, the referenced 20-ft gate does not provide access to Area 1. Rather, it provides access only to the fenced "corridor" to the northeast of Area 1. This fenced corridor contains an air monitoring station, groundwater monitoring wells, and a stormwater outfall. It is accessed for the purposes of monitoring these locations and for performing grass mowing. The label associated with this gate has been removed from Figure 3 to minimize confusion.*

c. Site Entrances, third and fourth paragraphs – The third paragraph states that primary and secondary gates will be kept closed and padlocked when not in use and the fourth paragraph states that workers will exit through the nearest secondary gate if egress is not possible through the primary gate. It is unclear how workers will exit from secondary gates in an emergency if they are kept padlocked. Provide additional explanation regarding how personnel will exit OU-1 during an emergency.

Response: *The text of the ERP has been revised in accordance with the EPA's comment to clarify the terminology for OU-1 gates and the key and lock procedures for OU-1 workers.*

d. Roads, page 9 – The road types are clear if Figure 5 is printed in color; however, if it is printed in black and white, they are not identifiable. The EPA recommends using different line weights or patterns in addition to colors to differentiate roads passable by different types of vehicles.

Response: *Figure 5 has been revised in accordance with the EPA's comment such that roads passable to different types of vehicles can be distinguished even when the figure is printed in black-and-white. Road segments which are passable to fire trucks only have also been labeled for clarity.*

e. Roads, page 9 – During RD and RA, roads may be designed and constructed for heavy hauling purposes in and around OU-1. Since infrastructure may change during the RD and RA add text to indicate this ERP will be revised (see comment 3d) in consideration of any new infrastructure, including roads, and a determination will be made about their suitability for use by emergency response personnel and equipment.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

f. Emergency Communication, page 9 – It is unclear how personnel on-site will be accounted for in the case of an emergency, especially one that requires personnel to exit through secondary or multiple gates/exists. Additional detail to handle this situation, such

as sign-in and out requirements and centralized meet-up locations during an emergency event, should be added to this document. Also, if facility personnel on-site are expected to help coordinate access to areas or equipment, how that coordination will occur should be discussed in this section.

Response: *The text of the ERP has been revised in accordance with the EPA's comment. Figure 2 has also been revised to illustrate the emergency meet-up locations for OU-1.*

g. On-Site Emergency Resources, page 9 – This section references Table 2. Table 2 states that the OU-1 resources listed are available in Area 1 and Area 2 office trailers. It also indicates that one Ludlum Model 12 Survey Meter and one Ludlum Model 2360 Data Logger are available for emergency resources for OU-1. Clarify whether one of each instrument is in each office trailer, or one of each instrument is available for all of OU-1. If there is only one of each for OU-1, state which office trailer they will be located in.

Response: *Table 2 and the text of ERP have been revised in accordance with the EPA's comment to clarify that the dedicated OU-1 gamma survey meter and dedicated OU-1 data logger with alpha-beta detector are both maintained off-site at the Radiation Safety Officer's office, along with check sources for the instruments. The office is located at 3377 Hollenberg Drive, Bridgeton, MO 63044. Figure 1 has been revised to illustrate the office's location.*

6. Radiation Safety During Emergencies, Priorities During Emergency Response, page 10.

a. State specifically whether radiation personal protective equipment, or PPE, will be available to emergency responders prior to the OU-1 Radiation Safety Officer arriving on site. Clarify whether the office trailers outside of Area 1 and Area 2 will be kept locked while not in use and, if so, discuss how emergency responders are expected to gain access to equipment in the trailers.

Response: *The text of the ERP has been revised in accordance with the EPA's comment to clarify that the Area 1 and Area 2 trailers are not locked and that emergency responders may freely access the PPE stored there.*

b. Provide a description/discussion of appropriate procedures for frisking emergency personnel and equipment if they enter OU-1, and decontamination procedures for personnel and equipment, if radiation contamination is identified. If it is necessary to transport an individual impacted by radiation to the hospital, indicate whether the hospital will be notified, and if so, who will be responsible for contacting the hospital.

Response: *Emergency responders will not be subject to radiation safety frisking prior to entry into OU-1. The Radiation Safety Officer will coordinate the frisking and (if necessary) decontamination of emergency personnel and equipment during egress from OU-1, unless there is a life-threatening injury or other extenuating circumstance (e.g., an imminent need to evacuate the West Lake site).*

Currently, frisking and decontamination procedures are performed in accordance with the requirements of the Radiation Safety Plan (RSP) prepared for the installation of the NCC (Auxier 2016). Frisking and decontamination procedures specific to the RD / RA will be detailed in the RSP that will be included in the forthcoming Health and Safety Plan (HASP) (SOW Deliverable # 11). These procedures will supersede those devised and implemented for NCC installation and maintenance activities. The text of the ERP has been revised to clarify these points.

While it is extremely unlikely that an individual could or would be "impacted by radiation" from the site, if an individual working inside OU-1 needs to be transported to a hospital during an emergency, their PPE will be removed prior to transport (if possible) and the Radiation Safety Officer will notify the hospital. The text of the ERP has been revised to clarify this. The response strategies in Appendix A have also been revised to clarify that an injured individual's PPE will be removed prior to exiting OU-1.

c. Emergencies Requiring Air Monitoring, page 10 – The OU-1 air monitoring program referenced in this ERP will need to be updated in accordance with EPA comments on the existing program which are being submitted under separate cover. Also, the revised air monitoring plan, once approved, should be incorporated into the OU-1 Site Management Plan, or SMP, and the reference in this document should be revised accordingly.

Response: *The text of the ERP has been revised to clarify that the existing Air Monitoring, Sampling, and QA/QC Plan (Auxier 2014) will soon be revised or replaced in accordance with the EPA's August 15, 2019 comment letter and included as an appendix in the OU-1 Site Management Plan. References in the ERP to the air monitoring plan will be revised once the revised plan requested by the EPA has been approved.*

d. Emergencies Requiring Water Application, page 10 – Straw wattles are not necessarily sufficient for mitigating potential soil transport via water. Revise this section to reflect the process described in the IMP on page 17 including: construction of temporary berms; potential construction material for berms; retention of water on site; and subsequent pumping of accumulated water (including fire suppression water) into storage tanks for testing, management and ultimately disposal of the water. This section should state that any materials proposed for use in constructing the temporary berms should be stored on site in a designated location.

Response: *The NCC that has been constructed over the surface RIM in OU-1 Area 1 and Area 2 includes a non-woven geotextile overlain by 8 in. of limestone gravel. Accordingly, surface RIM is not currently exposed in such a manner that allows for the transport of this material via surface runoff. Straw wattles are believed to be sufficient for the management of small quantities of non-RIM-containing surface soils that might be transported via runoff during application of water during an emergency. In the event of extreme circumstances – e.g., emergency application of an extremely high volume of water that results in significant disturbance of the NCC – the site will implement appropriate and practicable corrective action measures to contain, divert, pump, and/or store potential runoff. The text of the ERP has been revised to clarify this.*

7. Post-Response Reporting, page 11.

a. Add a description of the type of emergency to the second bullet (e.g. fire, explosion, injury, etc.).

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

b. Add a bullet for evaluating the potential cause of the emergency event and recommendations for preventing such an event in the future, if possible.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

c. For purposes of record keeping, state where the report will be maintained on-site and what the retention time will be.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

d. Add language to this ERP to indicate that any breach in the NCC cover that is caused by an emergency event or the response to such an event will be repaired to its original specifications unless otherwise approved by EPA.

Response: *The text of the ERP has been revised in accordance with the EPA's comment.*

8. Figures. Add Lot 2A2 to figures 1, 4, and 5.

Response: *Figures 1, 4, and 5 have been revised in accordance with the EPA's comment.*

9. Emergency Response Strategies, Appendix A.

a. Call to 911/Spill Line. The response listed for this scenario is to call OU-1 personnel to notify them of the situation. This implies that the 911 or spill line operator will contact OU-1 personnel. Document how this has been arranged and confirm that it can/will occur, or revise this strategy to indicate how OU-1 personnel will be notified.

Response: *The response strategy has been revised and the text of the ERP has been revised in the "Emergency Assessment and Response Strategy" section to clarify the two potential types of 9-1-1 / spill line emergencies (call from inside or outside the site) and applicable notification procedures. Ultimately, the 9-1-1 / spill line operator has the responsibility to notify the OU-1 Emergency Response Manager in the event of an incoming 9-1-1 / spill line call from outside the site (e.g., from a member of the public). However, the text of the ERP has also been revised to state that during the development of the site's current IMP, the site requested of regulatory and local authorities that the 9-1-1 / spill line operator perform such notifications.*

b. Call to 911/Spill Line. The diagram needs to identify responses for two situations, one for if the call originates form within the facility and one for if the call originates outside the facility.

Response: *The response strategy has been revised in accordance with the EPA's comment.*

c. Personal Injury/Man Down/Personnel Contamination. There is no information in this flow diagram pertaining to personnel contamination. Revise this strategy to address decisions and actions if an injured person is contaminated.

Response: *Currently, there are no activities being performed in OU-1 which could realistically result in serious contamination of site workers or other personnel. No hazardous materials are currently stored within the boundaries of OU-1, and exposed surface RIM has been covered by the installation of the NCC. The potential for transport of incidental RIM out of OU-1 is minimized by the current practice of removing PPE prior to exiting OU-1 and egress frisking of personnel and vehicles/equipment. Accordingly, the response strategy has been revised to clarify that an injured individual's PPE will be removed prior to exiting OU-1 (unless instructed otherwise by first responders).*

d. Sudden Waste Movement / Exposed Waste. This strategy includes hot (steaming) or burning waste exposed. A scenario that includes exposed burning waste also falls under an emergency strategy for Fire. Revised this strategy appropriately and add language to the ERP that states if an emergency incident involves a scenario that falls under more than one of the outlined strategies, the most responsive strategy that addresses all issues will be used (e.g. burning waste exposed).

Response: *The response strategy and ERP text has been revised in accordance with the EPA's comment.*

e. All Emergency Strategies that list the initial assessment being performed by the Emergency Response Manager should have a specific line item added in the Response box to contact the OU-1 emergency response manager, and that position should be specified in the contact information box.

Response: *The response strategies have been revised in accordance with the EPA's comment.*

f. Add: Chris Jump cell 816-398-1965 to the contact list for Region 7 in the Emergency Strategies.

Response: *The response strategies have been revised in accordance with the EPA comment.*