

US EPA ARCHIVE DOCUMENT



February 27, 2014

Ms. Cecilia Tapia  
Director  
Superfund Division  
**United States Environmental Protection Agency**  
Region 7  
11201 Renner Boulevard  
Lenexa, Kansas 66219

RE: Bridgeton Landfill / OU-1 Coring (Phase 1B, 1C and 2) Work Plan – Addendum 2

Dear Ms. Tapia:

On behalf of our client, Bridgeton Landfill, LLC (hereinafter Bridgeton Landfill), Feezor Engineering, Inc. (FEI) hereby submits a request to modify the procedures approved in the January 8, 2014 Core Sampling (Phases 1B, 1C, and 2) Work Plan – Revision 1 and its 1st Addendum submitted February 11, 2014. Specifically, the requested modification to the work plan is to add the usage of a direct push percussion drilling technology Geoprobe to obtain material samples near selected Gamma Cone Penetration Test (GCPT) boreholes.

The roto-sonic drilling/sampling current methods outlined in the original work plan and its addendum did not consistently produce recoverable samples at discrete depths at the boring locations. The purpose of modifying the work plan is to more effectively obtain physical samples of the material at depths indicating gamma readings above background levels at select locations. The samples will then be sent to the laboratory as indicated in the January 8, 2014 Core Sampling (Phases 1B, 1C, and 2) Work Plan – Revision 1.

Direct push drilling will use the Geoprobe 8040-DT (or equivalent) in general adherence to the procedures outlined in ASTM D6282-98. The Geoprobe 8040-DT uses a 4.5-inch diameter rod, 5 feet in length, which collects a 3-inch diameter sample of 5 foot intervals. Drilling will occur within 3 - 5 feet of former GCPT boreholes at the following locations:

- GCPT 1-2
- GCPT 2-2
- GCPT 2-3
- GCPT 1C-6 (1C-6T1)
- GCPT 1C-2 (1C-2RA)



- GCPT 1C-4R
- GCPT 1C-12
- GCPT 8-1
- GCPT 119

Each core will be logged and laboratory sampling will occur at the location of the maximum gamma reading. Additional laboratory sampling may occur above and/or below the selected depth in the core. In addition, other locations may be selected with approval from the US EPA On-Scene Coordinator.

Each Geoprobe location will be plugged with a tremie pipe to install grout slurry in the borehole from its bottom depth up to a depth of approximately 2 feet below ground surface. The slurry would consist of neat cement, bentonite, or a combination of these materials, and would have a solids content of no less than 20%. Grouting via tremie would be used as part of the borehole abandonment procedures in that boreholes would be filled with grout from their total depths up to 2 feet below ground surface, then bentonite pellets would be used to backfill the top 2 feet of the borehole in general accordance with MDNR rules. If large voids in waste are encountered, then bentonite pellets would be used for these intervals during borehole abandonment. Having approval to utilize both grout and bentonite pellets would provide the flexibility needed to effectively abandon the boreholes depending on the field/drilling conditions encountered.

The Geoprobe tool string and the tremie pipe will be radiologically surveyed and decontaminated using the same procedures set forth in Section 7.1.2 of the Core Sampling (Phases 1B, 1C, and 2) Work Plan – Revision 1. Decontamination will occur between Geoprobe locations.

Field work will continue in accordance with this request. Approval is also sought to enable the US EPA On-Scene Coordinator to make decisions based on field conditions.

Thank you again for your cooperation in this matter. We look forward to continuing working with you on this project. If you have any questions, please feel free to contact me at (217) 483-3118 or Bridgeton Landfill's Environmental Manager Brian Power at (314) 744-8165.

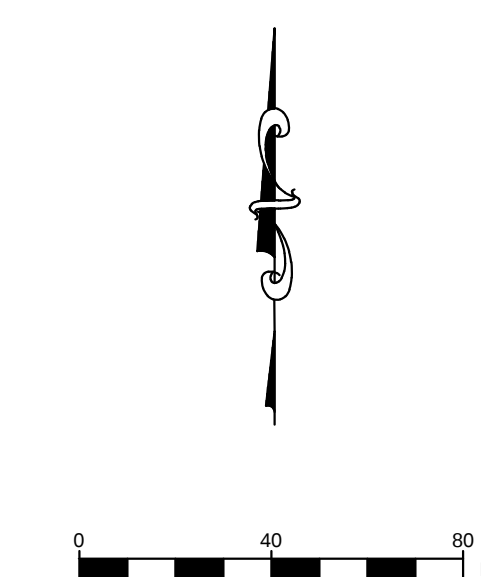
Sincerely,



Daniel R. Feezor, P.E.

**Feezor Engineering, Inc.**

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 PROPOSED GEOPROBE LOCATION  
 SONIC LOCATION  
 GCPT LOCATION  
  
 ELEVATED DOWNHOLE GAMMA READING  
 BOUNDARY OF ELEVATED DOWNHOLE READINGS  
 NON-ELEVATED DOWNHOLE GAMMA READING  
 BOUNDARY OF NON-ELEVATED DOWNHOLE READINGS  
 INTERPOLATED RIM LIMITS  
 FENCE  
 ROCK

|                                                                                |  |                                                     |  |                                                                                                                                                          |  |                                                                                       |  |                    |  |
|--------------------------------------------------------------------------------|--|-----------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|--------------------|--|
| WEST LAKE LANDFILL<br>13570 ST. CHARLES ROCK ROAD<br>BRIDGETON, MISSOURI 63044 |  | WEST LAKE LANDFILL OU-1<br>AREA 1 RIM INVESTIGATION |  |  Engineering is a Better World<br><b>FEZOR</b><br>ENGINEERING, INC. |  | FEBRUARY 2014<br>DESIGNED BY: PMA<br>APPROVED BY:                                     |  | DRAWING NO.:       |  |
| <b>PROPOSED GEOPROBES</b>                                                      |  |                                                     |  |  <b>FEZOR</b><br>ENGINEERING, INC.                                  |  |  |  |                    |  |
|                                                                                |  |                                                     |  |                                                                                                                                                          |  | PROJECT NUMBER: BT-026   FILE PATH:                                                   |  | REVISION      DATE |  |