Groundwater Discussions – Bridgeton Landfill and West Lake Landfill

Date/Time: January 20, 2016 – Start Time 10:00 A.M. to 2:00 P.M. central time

Teleconference line Ex. 6 - Personal Privacy **passcode#** Ex. 6 - Personal Privacy

Adobe Connect, web link to Adobe Connect:
https://epawebconferencing.acms.com/rlnwqlamekj/

AGENDA

1. **Introductions - EPA continue discussion on new Operable Unit (OU3) for the WLL site and recap prior discussion/To Do's**
    i. USGS to evaluate list of PCOCs/water quality parameters/leachate tracers
    ii. Schedule/target goals - drafting RI/FS AOC/SOW, negotiate, finalize
        - Nature and Extent (RI)/BLRA
        - CSM supported by MW network
        - F&T rolled into RI from OU1 data
        - Development of robust GW 3D infinite modeling to support CSM
        - FS that considers the wide array of GW engineered remedies, engineering/land use controls and future monitoring

2. **State of Missouri - update on Bridgeton and associated groundwater (GW) monitoring network**
    i. Update on Bridgeton/OU2 – Closure/Permitting Status
        1. Investigation results & remaining work
        2. Status of hydraulic control
        3. Need for and plans for implementation of Corrective Action
    ii. Action Items or Next Steps

3. **Discuss GW units - alluvial unit and bedrock unit, unit interactions:**
    i. Discuss primary hydraulic boundaries and anticipated or known localized flow mechanisms (need to locate, confirm and define by aquifer testing methods). Effects of leachate collection system on and potentially offsite.
    ii. Discuss "natural spring" located within the landfill unit or any other gaining/losing features to consider
    iii. Discuss placement of well screens across the identified units (or at least start this discussion)
    iv. Continue discussion on sampling methods or best practices needed to obtain representative results (low flow protocols, PDBs, use of PZ vs MWs, dedicated pumps, methods for low producing MWs, etc.)
    v. Action Items or Next Steps

4. **Discuss GW data sets and prior data objectives:**
    i. Understanding source(s) of radionuclides in GW:
        - RIM
        - Natural dissolution of bedrock

- Anthropomorphic dissolution of bedrock due to interaction with LF leachate
- Mobilization of radionuclides due to interaction with LF leachate
- Impacts of leachate combined with natural dissolution

ii. Discuss the current condition, locations, depths, and continued usefulness of the existing MWs at the site
iii. Plume chasing - Alluvial and Bedrock process/methods
iv. Discuss existing USGS understanding of the site and for general site vicinity
v. Discuss previous anomalies or interesting results (i.e. PZ-101, D14, etc.)
vi. Discuss on-going/pending F&T testing for WLL (OU1 status update)
vii. Discuss other potential OU3 COCs related to GW and landfill leachate (identification by tracer/ability to fingerprint onsite vs offsite contributors)
viii. Discuss off-site data/known GW issues from other potential sources/contributors (Auto repair shop, former leachate lagoon, Crossroads property, former service station, etc.)
ix. Actions items or Next Steps

5. **Recap of action items for OU3 moving forward:**
   i. State and EPA data needs to support GW investigations (network)/site model
   ii. State outlines of work to be performed/schedules for Bridgeton Landfill
   iii. EPA outlines/schedules for work to be performed for OU3
   iv. Discuss ongoing or planned MDNR actions

6. **Miscellaneous and next meeting**