From:	Mahler, Tom
To:	paulrosasco@emsidenver.com
Cc:	Vann, Bradley; Barker, Justin; Gieseke, Andrew; Juett, Lynn; Stoy, Alyse
Subject:	Further sediment sampling and storm water flow information
Date:	Monday, May 23, 2016 1:55:00 PM
Attachments:	QAPP for West Lake Landfill - Sediment Sampling_Revision 02.pdf 160-15647_DVR_Rad_6Jan16_RM.pdf 160-16583_DVR_Rad_13Mar16_RM.pdf

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Paul,

As you are aware, three sediment samples were collected on January 6th, 2016 as part of the Additional Characterization work for Area 1 and Area 2. For each of these three samples, EPA collected splits. After reviewing the validated data from you and your clients in addition to the EPA split samples data (see attached), EPA has determined that SED4 and EPA's split for this sample (SED 4-EPA DUP) contain radionuclides which meet the definition of RIM for OU-1 of the West Lake Landfill site. Specifically the Combined Thorium concentrations for SED4 and SED 4-EPA DUP are 16.16 pCi/g and 20.63 pCi/g respectively which exceeds the established limit of 7.9 pCi/g.

Additionally, EPA provided a QAPP for the collection of additional sediment samples which has since been updated. I have attached an updated version of this QAPP which includes an updated figure that depicts the previously collected sediment samples as well as new proposed sample locations. Specifically the QAPP requires the collection of additional sediment samples located between SED4 and the north corner of the West Lake Landfill property along the drainage pathway for storm water situated between the OU-1, Area 2 fence line and St. Charles Rock Road.

EPA Region 7 requires further characterization of this portion of the landfill property as soon as access is attainable and recent storm water recedes. We are requesting that the PRPs perform a gamma walkover survey to determine if there are any elevated areas of gamma radiation for which biased sediment samples could be collected. In addition, EPA Region 7 will require 5 additional sediment samples be collected approximately every 100 feet between SED 4 and the north corner of the landfill property (see attached updated figure from the QAAP). One of these sample locations will require the collection of a duplicate sample for data quality purposes. Finally, because of the recent storm events which have inundated this area with storm water, the collection of an additional sample from the SED4 location will also be required. EPA will collect these samples or will collect 100% split samples. This work is to be performed during the week of May 23, 2016. If a gamma survey cannot be performed the week of May 23, 2016, because of residual storm water or excessive vegetation, it may be delayed until conditions change. Please move forward with collection of the sediment samples regardless.

Finally, EPA is also requiring the PRPs to provide definitive information on the locations of storm water drainage that runs along the east side of the West Lake complex located between the norther portion of the Bridgeton landfill, OU-1 Area 1, and St. Charles Rock Road. Please ensure to include information associated with the four drop boxes and/or inlets located immediately North and South of the landfill entrance road, as well as whether there is a connection between the stormwater collection pond(s) in the northeast portion of the West Lake complex, and immediately north of the complex and the sediment pond to the north of the complex and east of St Charles Rock Road. Please provide this information by Wednesday, May 25, 2016

Please let me know if you have any questions about these proposed sampling plan. Also, please coordinate with me on the timing for collection of the sediment samples.

Tom Mahler

On-Scene Coordinator
US EPA Region 7
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