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LETTER AND THE U S EPA REGION III COMMENTS ON THE DRAFT UNIFORM FEDERAL POLICY SAMPLING AND ANALYSIS PLAN FOR SITE 38 RUM POINT LANDFILL NSWC INDIAN HEAD MD

11/19/2014

U S EPA REGION III PHILADELPHIA PA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

November 19, 2014

Joseph Rail, P.E.
NAVFAC Washington
1314 Harwood St. SE, Bldg. 212
Washington Navy Yard, DC 20374-5018

Subject: Indian Head-Draft Site 38-Rum Point Landfill. UFP-SAP. September 2014.

Mr. Rail:

EPA Tox Comment 1: According to page 3 of the report, waste material at this landfill is thought to contain ash from the thermal treatment tank (located on the Range 3 burn point). Since this ash material could potentially contain chlorinated dioxins, I recommend that confirmatory sampling following excavation of the landfill include dioxin analysis.

EPA ESC Comment 1: The SAP mentions the use of a Photo Ionization Detector (PID), but fails to explain exactly how the PID will be used; e.g., will it be used to confirm the presence/absence of site related organic COC to determine which samples will be shipped to the fixed-base laboratory for confirmation or will it be used to alert workers of the need to use a higher level of personal protective equipment?

EPA ESC Comment 2: QAPP Worksheet #22 – Field Equipment Calibration, Maintenance, Testing and Inspection Table lists the calibration activity of the Multi RAE PID as using ambient air and an isobutylene 100ppm calibration gas as the calibration standards. The use of ambient air as a calibration standard will cause false negative readings by zeroing out the background contaminants at the site. Since the reporting limits of most of the Contaminants of Concern (COC) at the site are in the parts per billion range, the use of a 100ppm isobutylene standard will significantly raise the instruments detection limit and give the user false negatives. The use of a VOC zeroing tube and a 10ppb isobutylene standard are strongly recommended for the calibration of the Photo Ionization Detector (PID). Subsection 8.3.2.3 Single Sensor Zero of the MultiRae Operator's Manual reads, "Even though most toxic gas sensors can be zeroed in fresh air, sensors such as the CO2 and parts-per-billion PID sensor for volatile organic compounds (VOCs) should not be zeroed in fresh air. Both CO2 gas and VOCs are normally present in ambient air, so zeroing these sensors in ambient air will not allow for a true zero to be set for

such sensors. The CO2 sensor should be zeroed in 99.9% nitrogen, and the parts-per-billion PID sensor with ambient air using a charcoal filter or a VOC zeroing tube."

EPA ESC Comment 3: SAP Worksheet #14-Summary of Project Tasks Subsection Confirmatory Soil Sampling reads, "Six composite (non-VOC) and six discrete (VOC) surface soil samples will be collected over a 0.5-acre area, or one sample per one-twelfth of an acre (see also Worksheet #9), for a total of 12 confirmation soil samples. Samples will be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, PCBs, explosives, and TAL metals." The reviewer strongly feels collection of one sample per one-twelfth of an acre (or one sample per 3,630 square feet) may not be representative of possible site contaminants. Because of the future potential use of land at this site, it is recommended that the entire site (2.2 acres) is divided into smaller sampling grids than what's listed in SAP Worksheet #17-Sampling Design and Rationale. Samples collected from smaller sampling grids (no larger than five feet by five feet) and field screened with no less than 10% of positive samples going to a fixed-base laboratory for confirmation, would allow for a more representative site assessment. The location of each grid should be recorded at the center of each grid (using a Global Positioning System) to enable the field crew to positively identify each grid that may be in need of additional soil removal. With the exception of the VOC fraction (which should be analyzed independent of all other samples), samples collected from each clearly labeled grid should be composited, homogenized and field analyzed for the full suite of site COCs.

NOTE:

EPA ESC Comment 4: The use of Matrix Spikes/Matrix Spike Duplicates (MS/MSD) are mentioned in SAP Worksheet #28-1 – 28-2 Laboratory QC Samples Table for VOCs and SVOCs in surface soil. Region III requires MS/MSD for Pesticides, PCBs and Metals only.

RECOMMENDATIONS:

EPA ESC Comment 5: Due to the uncertainty surrounding the types of waste that were discarded at Site 38, and because the "Implementation of the remedy will allow industrial/commercial use of the site, and restore the site to support base operations," as stated in the Executive Summary, it is recommended that the laboratory contracted to perform the analyses (GCAL Analytical Laboratories) be required to report Tentatively Identified Compounds (TICs). TIC reporting of the post excavation soil samples will enable a more complete and comprehensive site assessment of the remedial process by identifying possible contaminants not included in the current list. The post excavation TIC reporting of soil sample contaminants will ensure all contaminants have been properly reported and will act as a measure of how effective the remedial process is.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

John Burchette
Remedial Project Manager

cc: Curtis Detore