



State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

October 12, 2016

William Colvin
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Re: *Final Remedial Investigation Report for FTMM-25*
(*& Landfill Boundary Refinement - for FTMM-25 only - dated January 2016*)
Fort Monmouth
Oceanport, Monmouth County
PI G000000032

Dear Mr. Colvin:

The New Jersey Department of Environmental Protection (Department) has performed a review of the referenced Remedial Investigation Report, received on August 26, 2016. The review did not include an evaluation of the Risk Assessment, but did include an assessment of the boundary modification information applicable to FTMM-25 provided in Section 2.1 and Appendix I FTMM-25 of the January 2016 *Landfill Boundary Refinement and Methane Gas Survey Report for Nine Landfills*; comments generated from said review are included. Comments regarding the Methane Gas Survey portion of that document were previously provided; see the Department's correspondence dated April 20, 2016. Comments relative to the Remedial Investigation (RI) as well as the landfill boundary refinement efforts are as follows:

Soil Analytical Results

Elevated levels of PAHs and priority pollutant metals have been noted, however, contaminants of concern are to be addressed via engineering and institutional controls. Addressing all known levels of contamination in this manner is acceptable pending compliance with comments as noted below. If areas of obvious and/or significant contamination are encountered during the landfill preparation or capping activities, it is possible hot spot removal may be necessary.

As has been previously discussed, all historically noted sample locations containing elevated levels of contamination are to be addressed via engineering and institutional controls (none may remain beyond the area undergoing capping). Figure 2-1 of the submittal displays historic

boring locations relative to the 2015 revised boundary. A review of analytical data appears to confirm locations with elevated concentrations are located within the 2015 revised boundary.

Landfill Boundary

This office does not agree with Figure I1 regarding the designation of test pit M25TP9. Although it is designated green (no landfill material) on the figure, the log indicates intermittent pieces of concrete and brick were encountered in the 0-3.5' interval; the test pit should therefore be designated red. It does not impact the boundary, however, as the test pit is located within the designated landfill boundary.

Based upon reviews of the historic aerials, historic sampling locations and analytical findings, as well as test pit and boring locations and findings, the boundary as noted in Figure I1 of the January 2016 *Landfill Boundary Refinement and Methane Gas Survey Report for Nine Landfills* appears to adequately encompass the extent of the FTMM-25 landfill as well as the areas of contamination noted during soil sampling events.

Debris Found Beyond the Landfill

There is an area noted approximately 80'-100' north of the landfill, on Figures 2.1 (RIR) and I1 (LF Boundary) at which a review of the test pit logs indicate the presence of surficial or near surface material - Test Pit 8 (ash, brick 0-6"), Test Pit 8A (coal, ash, brick from 2-6"), Test Pit 8B (coal, concrete and ash 1-1.5') and Test Pit 15 (ash, coal 4-6"). The historic aerials appear to indicate this material is present in the area of a former roadway located between the landfill and an agricultural field. Although it is agreed these test pits are not located within the boundaries of the FTMM-25 landfill, as evidenced by review of the aerials, they do represent material which was apparently "dumped" in this area, and which must be addressed in an acceptable manner.

Finally, as per the *Management Approach for the Debris Areas near the FTMM-25 Landfill*, the exposed debris piles of varying sizes located several hundred feet northeast of the FTMM-25 landfill (most of which are noted in Figure 2.1A), while not considered part of the FTMM-25 landfill, are to be addressed via over-excavation (a minimum of one foot of underlying soil will be removed with the debris at each location). Field screening and visual observations will be performed during the debris removal for evidence of hazardous substances. The debris will be incorporated into the FTMM-25 landfill prior to capping activities. If the former/current presence of a hazardous material is indicated, sampling for TCL+TICs/TAL and EPH is to be performed.

Proposed Remedy

The landfill is to be cleared, regraded, and covered with a vegetated (or functional equivalent) two foot cap of clean soil. A vegetated soil cover of two feet of clean fill, the implementation of a LUC through filing of a deed notice with its incumbent inspection and reporting requirements,

was previously deemed appropriate and is acceptable. Although conceptually feasible, a “functional equivalent” in lieu of the vegetated layer must be proposed and reviewed for appropriateness once specifications are known, to ensure “functional equivalency”.

Miscellaneous

As previously discussed with the Army, the Department did not approve the site-wide background soil or ground water quality investigations referenced in the submittal, e.g. the Weston 1995 Background Investigation or 2011 Brinkerhoff Background Metals Evaluation.

Please contact this office with any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Linda S. Range".

Linda S. Range

C: Joe Pearson, Calibre
James Moore, USACE
Rick Harrison, FMERA
Joe Fallon, FMERA