DEPARTMENT OF THE ARMY



OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT U.S. ARMY FORT MONMOUTH P.O. 148
OCEANPORT, NEW JERSEY 07757

15 May 2017

Ms. Linda Range
New Jersey Department of Environmental Protection
Bureau of Case Management
401 East State Street
PO Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028

SUBJECT: Landfill Meeting Summary12 April 2017

Fort Monmouth, Oceanport, Monmouth County

PI G00000032

Dear Ms. Range:

This letter has been prepared to summarize and document the discussions at the subject meeting that included a site walk with representatives from the Solid Waste Permitting Bureau and the Site Remediation Bureau of the New Jersey Department of Environmental Protection (NJDEP), the U.S. Army Corps of Engineers – New York District (USACE), Fort Monmouth (FTMM), Parsons, and Trinity Consultants. The intent of the site walk and meeting was to discuss: the methane gas results collected at the landfills in the summers of 2015 and 2016; and the delineation of the landfill boundaries based on the contents observed in the soil borings and test pit delineation work performed to date.

METHANE GAS DISCUSSSIONS

- NJDEP agreed that there is no need for an active or passive methane gas mitigation system
 at the landfills. NJDEP indicated that methane monitoring for the landfills may be needed
 only at FTMM-02 and FTMM-14 due to the presence of methane and the proximity of
 these landfills residences.
- USACE stated, as in the Proposed Plan for the landfills, the purpose of the planned regrading and additional cover (capping) is to address potential safety concerns. USACE stated that: 1) the planned capping will provide sufficient protection where low levels of methane have been detected in the landfills as the caps will be porous; 2) there have been no historical reports on the presence of methane at the on-post housing near FTMM-14 or at the off-post residences adjacent to FTMM-02 in more than 50 years of housing Army personnel; and 3) no further monitoring is necessary unless there is a specific reason for it to be appropriate or required by NJ regulations.

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- NJDEP asked whether monitoring for the presence of methane in the basements of the
 residential houses near FTMM-14 was performed. USACE replied that the Army is not
 aware of any methane monitoring performed in the residences and that there were no
 complaints of odor during or after landfill operations (approximately 50 years) indicating
 that methane was not present in the residences.
- Mike Trupin (Trinity Consultants) stated that typically, significant levels of methane are not generated at landfills of this age. Methane detected in the samples is most likely from soil gas. Over time we should expect that the concentrations should be lower if at all detectable. Mr. Trupin stated that wetlands are the largest contributor of naturally occurring methane; and that a large amount of the methane detected may be naturally occurring from the wetlands located on and underneath the landfills.
- USACE requested a conference call with the NJDEP to discuss their decision on the path forward for the potential monitoring of methane at landfills FTMM-02 and FTMM-14 prior to the issuance of NJDEP's formal decision. USACE stated that the record of decision (ROD) is going to be submitted to BRAC to address seven of the landfills and the Army would like resolution on methane gas monitoring from the NJDEP promptly. USACE may opt to install a passive system in FTMM-02 and FTMM-14 should methane monitoring issues at these locations not be resolved.

LANDFILL BOUNDARIES DISCUSSIONS

FTMM-02

- During the site walk Parsons identified the existence of a wetland area and drainage swale located on the eastern end of the landfill. During previous investigations, test pits located on the west side of the drainage swale contained waste and debris whereas test pits on the east side of the swale did not contain waste and debris. During the site walk, Parsons proposed to revise the eastern landfill limits to end at the top of slope along the west side of the drainage swale and terminate the landfill soil cover at the top of slope on the western side of the drainage swale. The NJDEP agreed to this proposal.
- Test pits (M2TP8 and M2TP10) and borings (B-13, B-25, B-64, B-171 and B-178) located along the perimeter of Mill Creek will be covered with a minimum of two feet of the landfill soil cover. As agreed to with NJDEP, the transition from the two-foot cover will terminate at the top of bank stabilization along the creek.

<u>FTMM-03</u>

 As agreed with NJDEP, test pits (M3TP12 and M3TP19) located along the perimeter of Lafetra Creek will be covered with a minimum of two feet of the landfill soil cover in this area will terminate at the top of bank stabilization along the creek. Linda S. Range FTMM Landfill Meeting -12 April, 2017 15 May 2017 Page 3 of 5

FTMM-04

- The NJDEP agreed with the approach that test pits located on the western side of Mill Creek that contain debris will be excavated and placed under the landfill soil cover located on the eastern side of Mill Creek.
- Parsons described that the landfill soil cover will be extended over to test pits (M4TP16 and M4TP17) located adjacent to North Drive and to boring B-12 located near Avenue of Memories. The landfill soil cover will be graded to allow for a 3:1 transition to the existing grade along the roads. The NJDEP agreed to this approach.
- NJDEP requested Parsons to evaluate M4TP4 and M4TP 14 and compare with adjacent test pits. After the meeting, Parsons reviewed the test pit logs for both M4TP4 and M4TP14. Test pit M4TP4 had black staining observed in the soil. Soils near test pit M4TP4 are planned to be excavated and relocated under the landfill soil cover. Test pit M4TP14 located east of M4TP4 did not contain debris or staining. Four test pits located south of M4TP4 and M4TP14 indicated little to no waste. Test pit M4TP25 indicates small pieces of tile and little ash. Parsons also reviewed the photographs of the test pits. The M4TP25 photos indicated predominantly brown sandy material, some graying sand (maybe topsoil mixed in) and no tile material present. Photos for test pits TP4 and TP4A indicated a coal and ash lens with no debris present. Test pit TP4B did not indicate any waste or debris material. During the site walk, Parsons explained to the NJDEP that excavation will occur starting at M4TP4 and extend horizontally and vertically until waste is no longer encountered. Excavation to the north, east, and west is bounded by North Drive, Mill Creek and a paved drive. Excavation will cease in these directions where further excavation could disturb either the Mill Creek bank stabilization or the paved surfaces of the driveway or North Drive.

FTMM-05

During the site walk, Parsons discussed M5TP8 in relation to B-254, located on the southwest corner of FTMM-05. B-254 was logged as not containing waste/debris; however, NJDEP expressed concern about the contaminant concentrations that exceeded residential and non-residential standards. B-254 is located inward to the landfill from test Pit M5TP8 (logged as not containing waste/debris). Indicating that B-254 is within the landfill soil cover boundary for FTMM-05. It was mutually agreed that terminating the landfill soil cover to M5TP8 would be sufficient since the cover would extend to B-254 since its located interior of the landfill (north) of M5TP8.

FTMM-08

• There were no discussions at FTMM-08.

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FTMM-12

- As agreed with NJDEP, the landfill soil cover will be extended over to borings B-94, -95, -102, -109 and -115 located along the west side of a road near existing building 978.
- NJDEP agreed that test pit M12TP39 (which did not contain waste/debris) will not require excavation since surrounding test pits did not contain waste/debris.
- During the site walk, Parsons explained that: 1) Building 909 is near test pits 11B, 11C, and M12TP18; 2) M12TP18 is located at one of the corners of Building 909; 3) the cover system will be constructed up to the edge of pavement near Building 909; 4) the transition from the top of the landfill soil cover to the surrounding grade will not occur beyond the edge of pavement or terminate at the building face; and 5) the material in test pit M12TP18 is most likely backfill for the building when it was constructed and not a result of landfilling. NJDEP agreed with the explanation. After the site walk, USACE indicated that the potential demolition of Building 909 would be discussed with the FMERA.
- Arsenic and lead were detected in soil at concentrations above the NJDEP residential direct contact soil remediation standards (RDCSRS) near monitoring well M12MW22 which is located outside the western boundary of the landfill. The Army agreed to excavate a 4 foot by 4-foot area in the location of the well to the top of natural subsurface soils, and backfill the excavation with clean soil. Background samples may also be collected as part of the excavation. The excavated material will be placed under the landfill soil cover. NJDEP agreed to this approach.

FTMM-14

Test pit M14TP17 is located at the limit of the landfill soil cover. As agreed with NJDEP
on the site walk the landfill soil cover construction will extend to the existing embankment
beyond the current limit to ensure test pit M14TP17 is located within the landfill bounds.

FTMM-18

- During the site walk, it was observed that there did not appear to be the potential for waste to exist beyond the landfill's northern fence line since the area is marsh land. The NJDEP agreed with Parsons proposal to revise the northern landfill limits to terminate at the northern fence line. Following the site walk, USACE agreed to NJDEP's request to include a statement in the plans that observed surficial waste will be removed and consolidated within the landfill soil cover of FTMM-18.
- During the site walk, Parsons proposed to revise the landfill's southeastern boundary to terminate on the northern side of an existing drainage swale. The landfill soil cover will be extended to test pits 5A, 5B, and 5C located north of the drainage swale and the landfill soil cover will not be extended over to test pits (M18TP15 through M18TP20) located on the south side of the drainage swale. NJDEP agreed to this change where no contaminants were detected south of this area to warrant additional landfill soil cover.

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FTMM-25

Test pits 8, 8A, 8B and 8C are located on the north side of Shrewsbury creek which is
covered with dense vegetation. Following the site walk, the USACE and NJDEP agreed that
the test pit logs indications were not significant to warrant the excessive disturbance
necessary to gain access to this area to relocate the material under the FTMM-25 landfill
soil cover.

DETERMINATION ON THE REMOVAL OF WASTES DURING LANDFILL COVER CONSTRUCTION

As discussed with the NJDEP, a criterion will be established prior to the construction of the landfill soil cover to determine if wastes encountered outside of the landfill limits would require either excavation and relocation under the landfill soil cover or would be left in place with the extension of the landfill soil cover over the location of the waste.

As outlined in the "Landfill Boundary Refinement and Methane Gas Survey Report for the Nine Landfills" (Parsons January 2016), submitted to the NJDEP, material requiring action (either relocation and placement under the associated landfill soil cover or extending the soil cover over the material) or no-action will be classified as follows:

- Contiguous soil and waste/debris mixture (action required).
- Soils with miscellaneous singular pieces of debris or scattered debris that is not contiguous. Debris of *de minimus* quantity; (no action).
- Soils only. No waste/debris observed; (no action)

The technical point of contact is Cris Grill who can be reached at 617-449-1583 or cris.grill@parsons.com. I can be reached at (732) 380-7064 or by email at william.r.colvin18.civ@mail.mil.

Sincerely,

Willeam K Colin William R. Colvin, PMP, CHMM, PG

BRAC Environmental Coordinator

OACSIM - U.S. Army Fort Monmouth

James Moore, USACE (e-mail);

Parson

cc:



New Jersey Department of Environmental Protection Site Remediation Program

Report Certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites

These certifications are to be used for reports submitted for RCRA GPRA 2020, CERCLA, and Federal Facility Sites. The Department has developed guidance for report certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites under traditional oversight. The "Person Responsible for Conducting the Remediation Information and Certification" is required to be submitted with each report. For those sites that are required or opt to use a Licensed Site Remediation Professional (LSRP) the report must also be certified by the LSRP using the "Licensed Site Remediation Professional Information and Statement". For additional guidance regarding the requirement for LSRPs at RCRA GPRA 2020, CERCLA and Federal Facility Sites see http://www.nj.gov/dep/srp/srra/training/matrix/quick_ref/rcra_cercla_fed_facility_sites.pdf.

Document: "Landfill Meeting Summary 12 April 2017 with NJDEP"

PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION		
Full Legal Name of the Person Responsible for Conducting the Remediation: William R. Colvin		
Representative First Name: William Representative Last Name: Colvin		
Ext:	Fax:	
State: No	J Zip Code: _	07757
This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification		
in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).		
I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties. Signature: Date: 05/15/2017 William R. Colvin / BRAC Environmental Coordinator		
	g the Reme Representation State: Note of the conduction of the submitting ten false set only statute the statute of the submitten false set only statute the statute of the submitten false set only statute the submitten false set only se	g the Remediation: William R. Colvin Representative Last Name: Colvin Ext: Fax: State: NJ Zip Code: e for conducting the remediation who is subsemediation of Contaminated Sites rule at Noted and am familiar with the information subsequiry of those individuals immediately respect the submitted information is true, accurate by submitting false, inaccurate or incomplete the false statement which I do not believe from statute, I am personally liable for the processing the submitted information is true.