



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PUBLICLY FUNDED REMEDIATION ELEMENT
P.O. BOX 413
TRENTON, NJ 08625-0413

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

October 28, 2008

Mr. Joseph Fallon, CHMM
Directorate of Public Works
ATTN: IMNE-MON-PWE
167 Riverside Ave.
Fort Monmouth, NJ 07703

RE: Draft Site Investigation Report
Fort Monmouth, NJ

Dear Mr. Fallon:

The NJDEP Division of Remediation Management & Response (DRMR) has reviewed the Draft Site Investigation Report dated July 21, 2008 by Shaw Environmental, Inc., which was prepared under Phase II of the Environmental Condition of Property (ECP) assessment of Fort Monmouth. Our comments are attached.

You or your staff may contact me at 609-633-0766 with any questions on the enclosed comments, or any other site remediation matters at Fort Monmouth.

Sincerely,

A handwritten signature in cursive script that reads "Larry Quinn".

Larry Quinn, P.E., CHMM, Site Manager
Bureau of Design and Construction

Attachment

NJDEP COMMENTS on
SITE INVESTIGATION REPORT
FORT MONMOUTH, NJ

General Comments

1. USTs at Parcels 14, 28, 51, 76, and 79. The recommendation of no further action (NFA) for the suspected underground storage tanks (USTs) is not acceptable to the NJDEP. The suspected USTs are subject to New Jersey regulations N.J.A.C. 7:26E – Technical Requirements for Site Remediation (the Technical Requirements). Under the Technical Requirements, Fort Monmouth is required to do at least the following in regard to the suspected USTs:
 - a) Verify the tank contents and collect a sample of any contents for analysis as specified at 7:26E-3.9(a)3.iii,
 - b) Collect and analyze at least 4 soil samples within 2 feet of each tank as specified at 7:26E-3.9(a)3.i,
 - c) Conduct a site investigation for ground water in accordance with 7:26E-3.7 and 3.4,
 - d) Implement remedial action and tank closure in accordance with 7:26E-6.3(b).

The soil and ground water sampling conducted during the Army's Site Investigation (SI) are a good starting point. However, since suspected USTs have been identified by geophysical surveys, the specific sampling requirements of 7:26E-3.4, 3.7, and 3.9 must now be followed.

The suspected USTs are **also** subject to N.J.A.C. 7:14B - Underground Storage Tanks. Under 7:14B-1.4(b)3, tanks of any size used to store heating oil for onsite consumption in a residential building (such as a barracks) are exempted from the requirements of the UST regulations. However, all other hazardous substance USTs of any size are regulated due to the aggregate volume provision found in the definition of "Tank capacity" in 7:14B-1.6. All confirmed regulated USTs at Fort Monmouth must be registered and closed in accordance with 7:14B.

2. Septic System at Parcel 28. Similarly, the recommendation of NFA for the septic tank, septic box, and septic piping at Parcel 28 is also unacceptable. The septic system components must be sampled as specified at 7:26E – 3.9(e)3 and the ground water sampling requirements of 7:26E-3.7 must also be followed.
3. Action Levels, page 2-14. Analytical results were compared to NJDEP criteria, specifically the non-residential direct contact soil cleanup criteria (NRDCSCC) and the impact-to-ground water soil cleanup criteria (IGWSCC). Subsequent to the start of the site investigation, NJDEP has promulgated new Soil Remediation Standards (SRS). The NJDEP has provided for a phase in period for the new SRS. If a Remedial Action Workplan (RAW) is submitted to the Department on or before December 2, 2008 (6 months after the June 2, 2008 promulgation date) then the

subsequent cleanup may be conducted using the previous SCC. However, any remedial actions not approved by NJDEP by the December 2, 2008 deadline must follow the new SRS. Detailed guidance can be found at the following website: <http://www.nj.gov/dep/srp/guidance/rs/>.

4. Sediments at Parcels 15, 27, 28, 39, 43, 49, 61, and 69. NJDEP concurs with the recommendations to further evaluate sediments at these Parcels as part of a facility-wide baseline ecological evaluation. BEE
5. Indoor Air at Parcels 15, 34, 43, 50, and 52. NJDEP concurs with the recommendations to conduct one additional round of indoor air sampling at these Parcels.
6. Section 4.1.2, Surface and Subsurface Soil Investigations. This section discusses the results of soil sampling at multiple areas of concern (AOCs) relative to the NJDEP **Non-Residential** Direct Contact Soil Cleanup Criteria (NRDCSCC). Further evaluation of soil contamination is recommended at some, but not all, soil AOCs.

The future use of most Parcels at Fort Monmouth is not yet certain. Since future residential use is possible, **all** areas of soil contamination must be delineated to the **Residential** Direct Contact Soil Cleanup Criteria (RDCSCC). Remediation of soils by the Army to the NRDCSCC prior to property transfer would be acceptable, but deed notices would be required to document remaining soil contamination above the RDCSCC, and appropriate engineering controls must be implemented and documented.

*Delineate
to Res.*

~~Exclude~~
*Conclusion:
D&R to
Non Res.*

Parcel-Specific Comments

Parcel 13 – Former Barracks (Buildings 2004-2016)

1. The recommendations of NFA for soil and ground water are acceptable based upon the sampling results and the results of the geophysical survey.

~~Assessment~~ 2. The Report states that no suspected USTs were located by the geophysical surveys, however it further indicates that no UST removals have been documented at the locations of numerous former barracks within Parcel 13. The Report should provide a possible explanation(s) for why no USTs were found.

*eg. Red property Records
Review Concludes all
Subject Building was
heated by Coal or Gas.*

Parcel 14 – Northwest Portion of CWA

1. See General Comment #1 above.

Parcel 15 – Building 2700

1. The Report states that no suspected USTs were located by the geophysical surveys, however it further indicates that no UST removals have been documented at the locations of numerous former barracks within Parcel 15. The Report should provide a possible explanation(s) for why no USTs were found.
2. It is unclear why an NFA for ground water is being recommended when a ground water remediation is currently being implemented for the CW-1 area. If the Army wants to identify individual AOCs within Parcel 15 for an NFA designation, they should make that case for those individual AOCs.
3. The recommendation of NFA for soil is acceptable based upon the sampling results and the results of the geophysical survey.
4. The report states that well UST-2337-65 could not be located. If the well has been surveyed, an attempt shall be made to locate the well using the State Plane Coordinates.

Parcel 27 – Southwestern Corner CWA

1. The report states that numerous USTs were removed from this parcel and are summarized in the Phase I ECP Report. Appendix A of that document states that the Department sent UST closure approval letters for 7 of the 12 USTs that were removed, and that the Army is waiting for Department approval of the remaining 5 UST closures.

NFA for soil and ground water cannot be approved until documentation on all 12 USTs, including the closure reports for the remaining 5 USTs, are reviewed by the NJDEP project team. NJDEP requests that the Army provide a brief summary of the 7 USTs that received Department approval. This summary should include a figure showing the former UST locations and the soil and ground water sampling locations and results.

Parcel 28 - Former Eatontown Laboratory

1. See General Comment #2 above.
2. Former installation plans and figures show three separate septic tanks and leach fields and one underground transformer vault. These potential AOCs must be shown on Figure 3.5-1 to allow comparison with sample locations.

3. Figure 3.5-2 shows that only one suspected septic tank, one suspected septic distribution tank, and one suspected pipe were found. The Report should provide a possible explanation(s) for why the suspected three septic tanks and leach fields and one underground transformer vault weren't located.
4. There is no recommendation or proposal for the former storage areas and possible former tank pads.

Parcel 34 – Building 2567

No specific comments. NJDEP hopes to review the Remedial Investigation Report and Remedial Action Workplan (dated 10-28-05) on Building 2567 in the coming months.

Parcel 38 – Former Outdoor Pistol Range (1940-1955)

1. The NFA proposal is not acceptable. Since the site may have been re-worked, the surface soil sampling results are not a reliable indicator of potential ground water contamination, and a site investigation for ground water must be performed in accordance with 7:26E-3.7. Ground water samples should be analyzed for lead.

Parcel 39 - Building 1150 (Vail Hall)

1. The report states that no metal contaminants were detected in soil above the NJDEP NRDCSCC. The recommendation of NFA for soil is acceptable, however, soil contaminants must be compared to and delineated to the RDCSCC, so that a deed notice can be filed when necessary.

Parcel 43 – Building 1122 (Do-it-yourself Auto Repair)

No specific comments. NJDEP recently provided comments on reports specific to Building 1122.

Parcel 49 - Former Squier Laboratory Complex

1. NJDEP concurs with the recommendations to conduct additional sampling of surface soils to delineate contaminants above NJDEP criteria.
2. The proposal to add benzene and bromodichloromethane to the proposed CEA for the M-18 Landfill should be included in a future CEA proposal.

3. The SI Report must include some discussion regarding the source of the VOC contaminants in ground water or the remediation of the contamination, as required by N.J.A.C. 7:26E-3.13(b)4ii(1) and N.J.A.C. 7:26E-3.13(b)4ii(4).

Parcel 50, IRP Sites FTMM-54, FTMM-55 and FTMM-61

No specific comments. The comments previously provided by NJDEP on the M-18 Landfill, Building 296, and Building 290 sites in a letter dated August 14, 2007 need to be addressed.

Parcel 51 – 750 Area, 500 Area, 600 Area, 1100 Area – Former Buildings

1. See General Comment #1 above.

Parcel 52 – Building 699 - Army Exchange Services Gas Station

No specific comments. NJDEP hopes to begin reviewing the available Remedial Action Progress Reports on Building 699 in the coming months.

Parcel 57 – Former Coal Storage and Railroad Unloading – 800 Area

1. NJDEP concurs with the general recommendation to conduct additional soil and ground water sampling. A remedial investigation (RI) of ground water is required pursuant to N.J.A.C. 7:26E-4.4. A RI workplan for all proposed investigation work shall be submitted for NJDEP approval.
2. Previous NJDEP comments requested that the analytical parameters for soils include PCBs, due to reported historical coal storage and fuel unloading activities. The requested PCB analyses were not performed. Soil sample collection and analysis for PCBs must be included in the RI work plan.

Parcel 61 – Building 1075 - Patterson Health Clinic

1. NJDEP concurs with the recommendations to conduct additional soil sampling to evaluate base neutral contamination.
2. Previous NJDEP comments requested that the analytical parameters for soils include PCBs, due to reported historical coal storage and fuel unloading activities. The requested PCB analyses were not performed. Soil samples must be re-collected and analyzed for PCBs.

Parcel 69 - Building 900 Former Vehicle Repair/Motor Pool

1. The proposed NFA for soil is not acceptable. Sample analysis at this AOC should have included analysis for PCBs, due to the former waste oil tank, as stated in previous NJDEP comments. Soil samples must be re-collected and analyzed for PCBs.
2. All sediment samples collected adjacent to Parcel 69 must include PCB analysis.
3. NJDEP concurs with the recommendations to further evaluate ground water. Pursuant to N.J.A.C. 7:26E-4.4, a remedial investigation of ground water is required. An investigation workplan must be submitted for NJDEP review and approval.

Parcel 70 – Building 551 – Former Photoprocessing

1. NJDEP concurs with the recommendations for no further action (NFA).

Parcel 76 – 200 Area, 300 Area – Former Barracks

1. See General Comment #1 above.

Parcel 79 – 400 Area Former Barracks

1. See General Comment #1 above.

Parcel 80 – Former Buildings 105 and 106 – Photoprocessing

1. The footprint of the former building 105 and 106 should be shown on Figure 3.20-1. On the current Figure, it cannot be determined where the former buildings were located in relation to the Geoprobe borings, so NFA for soil can't be approved.
2. The NJDEP concurs with the recommendation for further evaluation of ground water. Pursuant to N.J.A.C. 7:26E-4.4, a remedial investigation of ground water is required. An RI workplan must be submitted for NJDEP review and approval.

Parcel 83 - Northeast MP

1. Former structures, buildings and other areas of concern are discussed in the text and in the tables but are not indicated on the Figure 3.21-1. All areas of concern, whether existing or former structures, must be depicted on the site figures.

2. The NFA proposal for ground water is acceptable, based on the ground water sampling results presented in the report.

Sanitary Sewer System

No comments.

Electrical Substations

1. As discussed in General Comment #6, a Deed Notice and engineering controls are required at the 2 locations where PCBs were found above the RDCSCC of 0.49 ppm.
-