DEPARTMENT OF THE ARMY



Headquarters, U.S. Army Garrison Fort Monmouth Fort Monmouth, New Jersey 07703 - 5101



ATTENTION OF Directorate of Public Works

July 7, 1998

State of New Jersey
Department of Environmental Protection
Division of Responsible Party Site Remediation
Bureau of Federal Case Management
ATTN: Ian Curtis
CN 028
Trenton, NJ 08625-0028

SUBJECT: Remedial Investigation of Landfill Cover Material

Re: NJDEP Correspondence (Dated April 4, 1996),

Remedial Investigation Report,

Fort Monmouth (Main Post and Charles Wood), NJ

U.S. Army Fort Monmouth
Directorate of Public Works Correspondence (Dated February 24, 1997)
Response to NJDEP Comments, Remedial Investigation Report
Fort Monmouth (Main Post and Charles Wood), NJ

Dear Mr. Curtis:

Based upon our recent discussions regarding ongoing remedial activities at Fort Monmouth, I'm writing this letter to reiterate the Directorate of Public Works (DPW) position regarding the landfill cover material which currently exists at nine former sanitary landfill sites. Eight of the nine landfill sites are located on the Main Post and the remaining site is located in the Charles Wood area. The nine former landfill sites are as follows: M-2, M-3, M-4, M-5, M-8, M-12, M-14, M-18 and CW-3A.

In a letter dated April 4, 1996, under the General Comments Section, Item # 1 - Landfills, you state that all base landfills must comply with NJ Solid Waste Management Act N.J.A.C. 7:26-2A et seq. If Fort Monmouth is able to document that the appropriate solid waste closure procedures were followed, no additional action is required other than the NJDEP approved monitoring. However, if an approved closure was not performed at the landfill, it is recommended that a minimum soil cover of one foot be extended over all areas of documented disposal activities. Also, the approximate boundaries must be established and annotated in the Declaration of Environmental Restriction.

A meeting was held at Fort Monmouth on May 14, 1996 to further discuss various issues of concern as referenced in your April 4, 1996 letter. During the course of the meeting a discussion ensued regarding the existing cover material at each of the closed landfill sites. At said time I stated that the DPW would be unable to document that the nine former landfill sites had been closed in accordance with N.J.A.C. 7:26-2A et seq. It should be noted however that the regulatory statue cited only refers to sanitary landfills operated on or after January 1, 1982. The last sanitary landfill (Site M-8) remaining in operation at Fort Monmouth was closed in October of 1981. Data presented in Table # 1 lists each of the nine landfill sites, approximate acreage and their dates of operation. At the time of closure, each landfill was covered with sufficient soil to properly cap the waste debris which was placed at the site. Cover materials were derived from both onsite and offsite. At present, the thickness of the cover material varies from site to site, but generally is at least one foot in thickness. In accordance with the data presented in Table # 1, the referenced landfills have been closed for a period of between seventeen and forty-two years. During the course of that time, each site has naturally vegetated. The existing vegetation provides both habitat and a food source for a variety of animal species. In addition, the existing vegetation plays a major role in controlling soil erosion. This is particularly important for sites bordering surface water bodies. Each of the former landfill sites are located adjacent to surface water bodies.

At the May 14, 1996 meeting, the DPW proposed to collect surface soil samples from each of the nine landfill sites to document that the existing cover material did not contain contaminant levels above the Residential Direct Contact Soil Cleanup Criteria and/or established background levels. This proposal was offered as an alternative approach to recovering the landfill sites with additional fill materials. Our alternative approach would prevent the destruction of the existing vegetation which in turn would displace numerous animal species and also result in significant soil erosion problems. Based upon your comments at the time of the meeting, you viewed our proposal as a favorable option. In order to move forward with the proposal, you advised us to submit our alternative approach in writing for view and comment. In a letter dated February 24, 1997, this proposal was formally submitted to you. As part of our write up, we specified that soil samples would be collected in accordance with the requirements set forth in N.J.A.C. 7:26E et seq. and the NJDEP Field Sampling Procedures Manual. The DPW would collect a distinct soil sample at thirty foot intervals within the boundaries of the former landfills. The DPW anticipates collecting approximately 1,900 samples not to include trip, field and duplicate samples. Each sample will be analyzed for TCL + 30 parameters and TAL metals.

The DPW has already made a significant investment in terms of buying new equipment and hiring additional laboratory personnel to initiate this project. To date, the DPW has spent \$775,000.00 to implement the landfill cover study. We anticipate spending an additional \$475,000.00 in fiscal year 1999 to complete said project. The DPW commenced sampling of the landfill cover material in March of 1998. Our estimated completion date for this project in terms of field sampling activities is April 30, 1999. Currently, the DPW plans on submitting separate Remedial Investigation Reports for each of the nine landfill sites. Numerical data shall be included within each report which accurately measures the thickness of the existing landfill cover material at each sampling location.

The overall purpose of this letter was to restate our position regarding the landfill cover material and to receive written NJDEP endorsement for our alternative approach method. In summary, we feel our approach will identify any potential areas of concern while protecting existing natural resources. Should you have any questions or concerns, the undersigned can be contacted at the following telephone number: (732) 532-6223.

Joseph M. Fallon, CHMM

Environmental Protection Specialist

Directorate of Public Works

TABLE # 1

LANDFILL SITE	ACREAGE	ESTIMATED SAMPLES	YEAR OPEN	YEAR CLOSED
				
M-2	6.5	314.6	1964	1968
M-3	5.9	285.6	1959	1964
M-4	1.4	67.8	1955	1956
M-5	3.2	154.9	1952	1959
M-8	7.2	348.5	1962	1981
M-12	2.1	101.6	1950	1966
M-14	6.9	334	1965	1966
M-18	4.1	198.4	1968	1969
CW-3A	2.6	125.8	1942	1957