## DEPARTMENT OF THE ARMY



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



REPLY TO ATTENTION OF

Directorate of Public Works

January 9, 1998

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

Site Investigation of Suspected Landfill

Site CW-3A

Fort Monmouth, New Jersey

Charles Wood Area

Dear Mr. Curtis:

Re:

On September 25, 1997, Directorate of Public Works (DPW) personnel, under your personal oversight, excavated several test pits at the CW-3A site to ascertain whether the site in question was previously utilized as a landfill. Upon excavating the test pits, waste materials, mostly in the form of construction debris, were observed within the test pits. The debris itself consisted of concrete, asphalt, brick, wood, glass and assorted scrap metals. Coal ash was also observed within each of the test pits.

To further evaluate the potential impact the landfill may have had on site soils and groundwater, the DPW has installed four shallow monitoring wells at the site. The wells were installed by a New Jersey licensed well driller on December 17, 1997. During monitoring well construction, continuous split spoon soil samples were collected in four foot increments. Each soil core was screened utilizing a PID meter and no readings above background were recorded. In addition, no signs of soil staining were observed. Based upon field observations and measurements, soil samples were collected at the following intervals: 0 to 6 inches, 18 to 24 inches and just above the water table. Samples collected at the 18 to 24 inch interval were collected solely for Volatile Organic Analysis (VOA) to include a GC/MS library search. Samples collected at the 0 to 6 inch interval are being analyzed for Target Compound List (TCL) + 30 parameters, minus the VOA parameters, Target Analyte List (TAL) metals and cyanide. Samples collected just above the water table are being analyzed for TCL + 30 parameters, TAL metals and cyanide. A coal ash sample was also collected on December 17<sup>th</sup> which will be analyzed for TCL + 30

parameters, TAL metals and cyanide. All samples are currently being analyzed in our inhouse NJDEP certified laboratory.

The former landfill site is bounded by Pearl Harbor Avenue to the west, an unnamed creek to the north, a wooded area to the east and the Pulse Power Facility (Bldg. 2707) to the south. The approximate area of the site is 116,000 square feet (2.6 acres). The topography of the area slopes gently from the southeast (70 feet above mean sea level) to the northwest (60 feet above mean sea level) toward the unnamed creek. The monitoring wells were strategically placed so that potential contaminant migration away from the landfill area could be observed. The positioning of the four monitoring wells are as follows: one well was installed upgradient of the landfill (southern boundary), two wells were placed partially down/side gradient of the landfill, forming the east and west boundaries, and one well was placed downgradient of the landfill forming the northern boundary. During the week of January 12th 1998, groundwater samples will be collected from each of the four wells. A second round of groundwater samples will be collected within thirty days of the first sampling episode. All samples will be analyzed for TCL + 30 parameters, TAL metals and cyanide. All groundwater sampling activities shall be conducted in accordance with the NJDEP Field Sampling Procedures Manual (May 1992).

Currently, I anticipate having a complete analytical report to include the two rounds of groundwater data, soil sample data and coal ash sample data on or before March 15, 1998. Once the data is reviewed, a report will be generated which will include recommendations for future actions at the site. A copy of this report will be forwarded to your attention. Should you have any questions or require any additional information regarding these actions, please contact the undersigned at the following telephone number: (732) 532-6223.

Sincerely,

Joseph M. Fallon, CHMM

**Environmental Protection Specialist** 

Directorate of Public Works