DECISION DOCUMENT

1. PURPOSE OF REMEDIAL ACTION

This decision document describes the remedial alternative for the M-15 (Water Tank) Site located on the Main Post of Fort Monmouth. The selected remedial alternative was chosen in accordance with the following regulatory requirements: CERCLA as amended by SARA, the NCP, RCRA, N.J.A.C. 7:26D (Cleanup Standards for Contaminated Sites), N.J.A.C. 7:26E (Technical Requirements for Site Remediation) and AR 200-1, as applicable.

A 500,000 gallon aboveground storage tank is located at the M-15 site. The tank was built in 1941 and is of steel construction. It has always been used for the storage of potable water. The tank is located directly next to Parkers Creek which is a tributary of the Shrewsbury river. Environmental contaminants in the form of pesticides and heavy metals have been identified in soil at the M-15 site. Two pesticides, 4,4-DDE and 4,4-DDT, have been identified above New Jersey Department of Environmental Protection (NJDEP) Direct Contact Soil Cleanup Criteria. It has been determined that the pesticide contamination is the result of past over spraying practices. Three heavy metals, cadmium, lead and zinc, have also been identified above NJDEP Direct Contact Soil Cleanup Criteria. Environmental sampling has confirmed that the contaminants are migrating horizontally towards Parkers Creek. Ecologically speaking, the creek provides food and shelter to numerous species of waterfowl, fish and shellfish. The creek is also utilized by local residents for fishing and crabbing purposes. The selected remedial alternative involves removing the contaminated soil from the site whereby eliminating the contaminants of concern.

This decision document was developed by the Directorate of Public Works Environmental Office, Fort Monmouth. All documentation has been submitted and approved by the NJDEP.

2. SUMMARY OF SITE RISK

The M-15 (Water Tank) Site is located in an unsecure area and is accessible to the public. As previously mentioned, the creek provides food, shelter and a breeding area for numerous species of waterfowl, fish and shellfish. Laboratory analysis of the two pesticide compounds, 4,4-DDE and 4,4-DDT, have been quantified at 6.6 mg/kg and 7.9 mg/kg respectively. Laboratory analysis of the three metal compounds, cadmium, lead and zinc, have been quantified at 4.5 mg/kg, 6,130 mg/kg and 12,800 mg/kg respectively. Elevated levels of the referenced contaminants have been documented to cause adverse effects on living organisms. Several species of fish and crabs are taken by area residents for food purposes. Contaminants such as these have the potential to become biologically magnified as they continue up the food chain.

3. SUMMARY OF REMEDIAL ALTERNATIVES

Approximately 13 cubic yards (20 tons) of contaminated soil shall be excavated and disposed of offsite. Excavation has been determined to be the most cost effective approach for eliminating all contaminants of concern at the site. The NJDEP Direct Contact Soil Cleanup Criteria for the referenced contaminants are as follows: 4,4-DDE (2 mg/kg), 4,4-DDT (2 mg/kg), cadmium (1 mg/kg), lead (400 mg/kg) and zinc (1,500 mg/kg). Following soil removal, the site shall be resampled and the data submitted to NJDEP. A no further action letter from the NJDEP shall be requested for the site.

4. PUBLIC/COMMUNITY INVOLVEMENT

At the present time, the Directorate of Public Works Environmental Office is working with the NJDEP and the U.S. Environmental Protection Agency Region II. Information relating to the site investigation and the planned remedial action has not been released to the general public.

5. DECLARATION

Because this remedy will not result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure, the five-year review will not apply to this action.

JOEL G. HIMSL

LTC, MP

Garrison Commander