



DEPARTMENT OF THE ARMY
UNITED STATES MILITARY ACADEMY

WEST POINT, NEW YORK 10996

October 26, 1999

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BUREAU OF RADIATION &
HAZARDOUS SITE MANAGEMENT
DIVISION OF SOLID &
HAZARDOUS MATERIALS

REPLY TO
ATTENTION OF

Directorate of Housing and Public Works

SUBJECT: Decision Document for the Motorpool East Landfill

Mr. Paul Patel
Division of Solid and Hazardous Materials
Bureau of Hazardous Waste Facilities
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233-9240

IN DEC DOCS

Dear Mr. Patel:

Please find enclosed the decision document for the Motor Pool East Landfill at the United States Military Academy at West Point. The decision document describes the selected action to re-grade and improve the existing landfill cap. Contact Mr. Jeff Sanborn of our Environmental Management Branch if you have any questions or concerns regarding this project. We look forward to your continuing contribution to the United States Military Academy's restoration program.

Sincerely,

Eugene E. Rood, P.E.
Chief, Environmental Management Division

Enclosure

DECISION DOCUMENT FOR THE MOTOR POOL EAST LANDFILL CLOSURE

UNITED STATES MILITARY ACADEMY WEST POINT, NY

1. PURPOSE

This decision document describes the selected action to improve drainage and replace the existing landfill cap at the Motor Pool East Landfill located at the United States Military Academy (USMA), West Point, NY. This action was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendment and Reauthorization Act (SARA); the National Contingency Plan (NCP); the Resource Conservation and Recovery Act (RCRA) and AR 200-1, as applicable.

The Motor Pool East Landfill received municipal solid waste, construction debris, and demolition debris from USMA and surrounding municipalities from approximately 1964 to 1969. Pit and fill methods of disposal were used at the landfill.

A leachate seep containing elevated levels of metals has been identified adjacent to the Motor Pool East Landfill. The selected remedy entails improving the perimeter drainage course, and capping the landfill with a new surface pavement system. This will reduce stormwater run-on and infiltration minimizing its contribution to leachate generation. USMA selected this remedial action alternative with support and approval from the New York State Department of Environmental Conservation (NYSDEC) RCRA Corrective Action Section.

2. SITE RISK

A leachate seep has been identified adjacent to the landfill. Levels of iron and sodium in the seep were above the NYSDEC Class GA standards. The observed iron concentration was also above the Class A standard for human consumption and wildlife protection. Groundwater around the landfill has levels of iron, manganese, zinc, and sodium that exceed NYSDEC Class GA standards. Higher concentrations for eleven water quality parameters were observed in groundwater downgradient from the landfill. No evidence of landfill gas generation is present at this landfill. Details of the site and the proposed remedy are available in the Design Analysis Report for Motorpool East Landfill Closure as prepared by EA Engineering Science and Technology in June 1999. Additional references include the Expanded RCRA Facility Assessment of Four Landfills Closure as prepared by EA Engineering Science and Technology in September 1996 and Final Subsurface Investigation Report for Subsurface Investigation USMA West Point NY as prepared by LAW Engineering and Environmental Services in July 1994. These documents are available for review in the West Point Post Library.

3. REMEDIAL ALTERNATIVES

The proposed design alternatives for the Motor Pool East Landfill closure are:

1. No Action. This action will not reduce leachate generation. The terrain will remain uneven and non-draining, promoting greater leachate generation. This alternative has no cost associated with it.

2. Management of Leachate/Impervious Cap. This alternative will reduce the amount of leachate generated by diverting runoff and reducing infiltration. The landfill surface will be regraded to promote surface water drainage to perimeter drainage swales. The estimated cost is \$400,000.

3. Minimization and Management of Leachate/Impervious Cap. This alternative includes the addition of an impervious plastic lined landfill cap to alternative 2. The cap will minimize the generation of leachate by preventing precipitation infiltration to the landfill. The estimated cost is \$680,000.

The design alternative selected for remediation of the Motor Pool East Landfill is option #2, Management of Leachate/Impervious Cap. Option 2 provides a cost-effective closure that protects human health and the environment, and meets the requirements of CERCLA, SARA, NCP, RCRA, and AR 200-1.

4. PUBLIC/COMMUNITY INVOLVEMENT


The landfill is utilized as a parking area for heavy equipment and USMA service vehicles. Project plans have been coordinated with the Engineering Plans and Services Branch, Motorpool personnel, and the New York State Department of Environmental Conservation. Project plans will be announced in the *Pointer View*, West Point's newspaper. Since the project does not alter the land use and will not impact the environment, the project is subject to Categorical Exclusion A-7 (construction that does not alter land use) as listed in AR 200-1. A Record of Environmental Consideration is under preparation.

5. DECLARATION

The selected remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this final remedial action, and is cost effective. This remedy satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principle element and utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable. 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. Long term monitoring and maintenance shall be implemented to ensure that protection of human health and the environment is maintained.

6. APPROVAL AND SIGNATURE

The selected alternative for the Motor Pool East Landfill is Management of Leachate/Impervious Cap. The cost of this action is \$400,000. The appropriate authority for this action is the United States Military Academy Installation Commander.



ARNOLD SMITH
COL, FA
Garrison Commander