

COMMUNITY INVOLVEMENT PLAN

FOR THE

**LONG TERM MONITORING PHASE FOR THE
INSTALLATION RESTORATION PROGRAM**

AT THE

UNITED STATES MILITARY ACADEMY

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1. PURPOSE

To provide information to internal and external public concerning the Installation Restoration Program (IRP) at the United States Military Academy (USMA). To ensure public notification and the opportunity for public comment is provided for during the Long-Term Monitoring (LTM) Phase for IRP Landfills at USMA. Since all of the IRP Landfill sites except two are located within the installation, most community involvement is limited to the internal USMA community. Planned external involvement would include briefing the status of the LTM Program at the Community Relations Council. This internal community includes the Staff/faculty, family members, civilian employees, tenant units and contractors. Information regarding the High School landfill will be provided as appropriate to the Superintendent of Schools.

2. BACKGROUND

USMA is located in Orange County, New York, on the west bank of the Hudson River approximately 45 miles north of New York City (Figure 1). The military reservation at West Point consists of 15,974 acres with the main post comprising 2,520 acres of that. The Main Post is bounded by New York State Route 218, the Hudson River, the Village of Highland Falls and U.S. Route 9W. West Point is crossed by the Hudson Highlands, a belt of steep-walled knobbed ridges, irregular hills and mountains.

Lands formerly known as the Stewart Army Subpost (STAS) are located approximately 14 miles northwest of USMA in New Windsor, New York. STAS had the primary mission of providing overflow family housing for West Point and facility support for non-USMA functions. STAS has undergone divestiture as follows:

- a. 19 November 1999, USMA transferred 263.86 acres to the Town of New Windsor, Orange County, New York
- b. 29 September 1999, USMA transferred 40.4 acres to the 77th Regional Support Command (Army Reserve)
- c. 3 February 2000, USMA transferred 78.63 acres and 11.69 acres (in the form of an easement) to the United States Marine Corps Reserve Mag 49, Detachment B

USMA is currently evaluating a proposed enhanced use lease option covering approximately 250 to 300 acres (portions of training areas D2 and E1) in the vicinity of Morgan Farm. This action has congressional involvement and has yet to be decided.

West Point has been an active U.S. Army Installation since 20 January 1778 and is a Field Operating Agency. It is America's oldest continuously occupied military installation. USMA was officially established at West Point on 16 March 1802. The initial purpose of the Academy was to obtain military technicians for all branches of the military service, to encourage the study of military art nationally, raise the level of training of the militia and to encourage the practical study of every science.

The current mission of USMA is to "To educate, train, and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of Duty, Honor, Country; professional growth throughout a career as an officer in the United States Army; and a lifetime of selfless service to the nation."

In 1961, West Point was designated a National Historical Landmark included in the National Register of Historic Places and protected by Executive Order 11593.

3. INSTALLATION RESTORATION PROGRAM

USMA has 24 sites grouped into six projects (Table 1) under the IRP that are listed as active sites in the Defense Environmental Restoration Program (DERP). Inactive landfills account for 20 of these sites. These landfills were used from the 1940's to the 1980's for the disposal of municipal solid waste, construction and demolition debris and land clearing debris. Analytical results of leachate samples from several of the landfills have exhibited heavy metal constituents. Locations of the IRP Landfills at USMA are presented in Figure 1. The other projects include:

- a. A former Skeet and Trap Range located in wetlands at the Camp Buckner area of USMA where lead deposits may be of concern,
- b. A former impact area used from the early 1800's to the late 1920's at the Crow's Nest Area of Storm King Mountain where ordnance and explosive waste has been reported as present, and
- c. The closure of several abandoned underground storage tanks.

Detailed descriptions of each are IRP site is summarized in Attachment 1. Previous studies completed at USMA concerning these sites are listed in Table 2.

In November 1988, USMA submitted a RCRA Part B permit application to the USEPA for hazardous waste storage and a Subpart X permit for an open burn / open detonation (OB/OD) site. USMA is considered a large quantity generator of hazardous waste. Accumulated hazardous waste is moved to a central storage area where it is staged prior to shipment for up to 90 days. In December 1988, the application for the container storage facility was rescinded by USMA and in May 1991, the container storage sites underwent closure inspection and testing by the EPA under "Closure Prior to Loss of Interim Status." Although the Part B permit had been rescinded, the Corrective Action provisions remain per the 1984 Hazardous and Solid Waste Amendments (HSWA) Section 3004 (h). Therefore, USMA remains under interim status until the remaining corrective actions are accomplished. The Subpart X permit application for the OB/OD site is still active. However the activity requiring the permit, routine demolition of explosive ordnance at a site within USMA's training impact area, ceased in 1992 when the EOD unit assigned to USMA was relocated. As a result of meetings and written communication with EPA and NYDEC during 1992, both agencies accepted that the burning of excess propellants in connection with cadet artillery training was an integral part of that training and therefore did not require a permit. More recently, USMA requested removal of its interim status (see below).

In November 1990, the US Army Environmental Hygiene Agency (USAEHA) conducted a survey of Solid Waste Management Units (SWMUs) at USMA pursuant to RCRA corrective action requirements. The USAEHA survey identified 16 inactive landfills at USMA. USMA subsequently identified four additional inactive landfills. RCRA Facility Assessments were performed on all 20 landfills of which nine require corrective measures. Five of the landfills have been remediated and 15 are currently in the long term monitoring (LTM) phase under the IRP (Table 1). Since the corrective measures at these landfills have been completed, USMA is currently in the process of terminating its interim status under RCRA Part B. LTM of groundwater in the vicinity of these landfills along with the maintenance of the landfills will continue to be performed.

In 1991, a Preliminary Assessment was initiated prior to the replacement of a natural gas line that crossed the Crow's Nest area of Storm King Mountain. Crow's Nest is a former artillery impact area. The project to replace the gas line was terminated following the discovery of ordnance and explosive waste (OEW) along the proposed gas line. A Remedial Investigation consisting of a limited surface sweep discovered 75 suspect OEW, 15 of which were on adjacent park property. The U.S. Army Safety Office assigned the site a Risk Assessment Code (RAC) 2 ranking which dropped its priority on the IRP. As defined in the Army Safety Program Guidelines (AR 385-10), a RAC is an expression of the risk associated with a hazard that combines the hazard severity and accident probability into a single Arabic numeral on a scale of I (highest) to IV (lowest). In 2002, a natural gas pipeline was installed in the area. The project included unexploded ordnance (UXO) clearance for the right-of-way.

In 1992, an investigation was initiated to assess the impact of lead deposition in a wetland from a formerly used Skeet and Trap Range at Camp Buckner. A qualitative risk assessment was generated for the site and the site is currently in the Long Term Monitoring (LTM) phase under the IRP.

In 1994, five USTs located at USMA and 11 previously abandoned USTs at STAS were removed under the IRP. Forty-five cubic yards of soil were removed from the area of Building 505 at USMA.

Cragston Landfill is a five-acre formerly permitted Municipal Solid Waste Landfill that was initially included in the IRP. It was found to be ineligible for Defense Environmental Restoration Account (DERA) funding because it was still operational after 1986. Cragston is undergoing RCRA Subtitle D Closure outside the IRP. The South Fill, Hospital Parking Lot and the Stadium Lot G and H landfills are listed in the Army Environmental Database-Restoration (AEDB-R) system but no further response action is planned, since records indicate that they were used for clean construction and demolition debris and no releases are evident.

The South Fill, Hospital Parking Lot and Michie Stadium Lot G and H Landfills are listed on the Army Environmental Database-Restoration (AEDB-R) system but no further response action is planned, since records indicate that they were used for clean construction and demolition debris and no releases are evident. The Cragston Landfill is a five acre formerly permitted Municipal Solid Waste Landfill that is undergoing RDRA Subtitle D Closure outside of the IRP.

On 26 November 2001, USMA submitted a letter to NYSDEC indicating that its remediation program that started in November 1990 had entered the LTM phase and formerly requested that its Interim Status be removed.

4. PROCEDURE

- a. Prepare a Community Involvement Plan (CIP) Fact Sheet that discusses the history of the IRP Program at USMA and explain in layman's terms the results of LTM sampling of groundwater conducted to date within the monitoring well network established for the landfills.
- b. Identify potential community members and stakeholders who may have a vested interest in the status of the LTM Program.
- c. Brief the status of the LTM Program at the Community Relations Council and/or local constituent meetings.
- d. Provide a newspaper article that summarizes the USMA IRP for publication in the installation newspaper. The introductory paragraph in the article will summarize the construction project

associated with the LTM and maintenance Program at the Michie Lot F, IRP Site. The distribution of the article will be set to coincide with the planned initiation of project construction activities.

- e. Publicize in the installation newspaper where the LTM Data Summary Reports are available for public review.
- f. In a, c, d and e above, provide means for community stakeholders to identify their concerns. Consider community/stakeholder concerns regarding the LTM Program results and incorporate these concerns into the 5-Year LTM Review of each IRP Site.
- g. Document all public meetings, advertisements or other community involvement activities.
- h. Prior to construction activities performed under the LTM Program, provide project schedule to affected community and stakeholders. Prepare DHPW Construction Project Notice (Attachment 2) and submit to DHPW Customer Service Representative for posting and advertisement.
- i. Keep affected community and stakeholders involved during the LTM Program, updating them on the schedule of LTM sampling and maintenance projects.

TABLE I

2003 LTM PHASE FOR THE IRP AT USMA

PROJECT	STATUS
6 Landfill Investigation	
Organic Compost Landfill	Long Term Monitoring
Post School (PX) Landfill	Long Term Monitoring
Ski Slope Landfill	Long Term Monitoring
Motor Pool Landfill	Long Term Monitoring
Michie Stadium Lot D Landfill	Long Term Monitoring
Michie Stadium Lot F Landfill	Long Term Monitoring
10 Landfill Investigation	
Post Exchange Landfill	Long Term Monitoring
Michie Stadium Lot A Landfill	Long Term Monitoring
Michie Stadium Lot B Landfill	Long Term Monitoring
Michie Stadium Lot C Landfill	Long Term Monitoring
Michie Stadium Lot E Landfill	Long Term Monitoring
Professor's Row Landfill	Response Complete
Morgan Farm Landfill	Response Complete
High School Landfill	Long Term Monitoring
Camp Buckner Landfill	Long Term Monitoring
Village Farm Landfill	Response Complete
4 Landfill Investigation	
Washington Gate Landfill	Response Complete
Ammunition Supply Point Landfill	Response Complete
Motor Pool East Landfill	Long Term Monitoring
Bldg.706 Parking Lot Landfill	Long Term Monitoring
Skeet and Trap Range	Response Complete
Crow's Nest Former Impact Area	Response Complete
UST Removal Projects	Response Complete
USTs at Building 505	Response Complete

TABLE 2

PREVIOUS STUDIES AT USMA

1. Dames and Moore, April 1982 Final Environmental Impact Statement Ongoing Operations of the USMA, West Point, Stewart Army Subpost and Galeville Training Site.
2. Design and Planning Associates and Aerial Mapping Services Inc., January 1976, Topographic Survey of USMA compiled by Photogrammetric Methods from Aerial Photos taken 6 Jan 76, Middletown, NY.
3. Environmental Science and Engineering, 1984, USMA Installation Assessment (Report No. 346).
4. Paulus, Sokolowski and Sartor, 1985, Draft Analysis of Existing Facilities, USMA, Environmental Assessment Report.
5. AEHA, November 1990, Evaluation of Solid Waste Management Units, at USMA, Aberdeen Proving Ground, MD.
6. LAW Engineering and Environmental Services, July 1994, FINAL - Subsurface Investigation Report of 6 Landfills, Kenesaw, GA.
7. Woodward Clyde Federal Services, January 1994, Work Plan and Chemical Data Acquisition Plan, RCRA Facility Assessment of Ten Landfills, Wayne, NJ.
8. EA Engineering, Science, and Technology, August 1993, Site Inspection Report Camp Buckner Skeet and Trap Range, Newburgh, NY.
9. EA Engineering, Science, and Technology, January 1994, Work Plan/Sampling and Analysis Plan Phase II Site Investigation Camp Buckner Skeet and Trap Range, Newburgh, NY.
10. Human Factors Applications, Inc., May 23, 1994, Unexploded Ordnance Site Survey Report for Crow's Nest, Indian Head, MD
11. Woodward Clyde Federal Services, June 1995, RCRA Facility Assessment (RFA) of Ten Landfills Report, Wayne, NJ.
12. EA Engineering, Science and Technology, November 1995, Phase II Site Investigation Camp Buckner Skeet and Trap Range, Newburgh, NY.
13. EA Engineering, Science and Technology, September 1996, Expanded RCRA Facility Assessment of Four Landfills, Newburgh, NY.
14. EA Engineering, Science and Technology, August 1996, Phase II Investigation Report of Six Landfills, Newburgh, NY.
15. EA Engineering, Science and Technology, August 1995, Remedial Investigation at Building 2228 Fueling Facility, Newburgh, NY.

16. International Technology Corporation, September 1996, U.S. Military Academy Landfill Remediation, Rochester, NY.
17. Malcolm Pirnie, Inc., June 1997, Final RCRA Facility Investigation of Ten Landfills, White Plains, NY.

ATTACHMENT 1

SUMMARY OF IRP SITES AT USMA

Organic Compost Landfill

The Organic Compost Landfill, was part of the 6 Landfill Investigation Report and is located northwest of Building 743; access is from Garrard Road. This 0.5 acre landfill was used in the 1960s for disposal of construction debris. More recently, the site had been used for composting of organic material including leaves, mulch, tree limbs and grass cuttings. The landfill is closed and currently used as a lumber storage yard. The landfill cover was tarred and chipped. The landfill is scheduled to be surfaced with asphalt in FY04. Although leachate seeps have been identified at this site in the past, recent engineering inspections have detected no seeps.



A leachate tank was installed at the site. The Organic Compost Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Post School Landfill

The Post School Landfill, which was part of the 6 Landfill Investigation Report, is located adjacent to the West Point Elementary School. Access is from the school parking lot or Barry Road. This 2.5-acre landfill was used approximately from 1964 - 1969. The pit and area methods were used. The landfill is closed and vegetated. The site was used as a playing field for the school and youth activities center. Although leachate seeps have been identified at this site in the past, recent engineering inspections have detected no seeps.

A leachate collection tank has been installed and upgraded. Sediments in an adjacent stream have been discolored by leachate. Differential settling and poor drainage have made the field unusable. The perimeter drainage swale and leachate collection system have been upgraded as an interim remedial action. A cap and drainage improvement design was finalized in FY97 and implemented in FY98. The Post School Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance is conducted at this site.



LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Ski Slope Landfill

The Ski Slope Landfill, which was part of the 6 Landfill Investigation Report, is located adjacent to the ski lodge; access is from NYS Route 218. This 0.7-acre landfill was used approximately between 1965 and 1974. The pit and area methods were used for disposal of sanitary and construction wastes. The landfill is closed and paved. The site is now used as a parking lot. Although leachate seeps have been identified at this site in the past, recent engineering inspections have detected no seeps.

Sediments in an adjacent stream have been discolored by leachate. A cap and drainage system improvements were constructed and completed in FY01. The Ski Slope Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.



Motor Pool Landfill

The Motor Pool Landfill, which was part of the 6 Landfill Investigation Report, is located east of the Motor Pool fuel distribution system; access is from Reynolds Road. This 4.5-acre landfill was used approximately from 1964 - 1969. The pit and fill method was used for disposal of sanitary refuse. The landfill is now used as a parking lot for motorpool vehicles. In FY99, the cap was enhanced and drainage controls were installed.

Leachate seeps have been identified at this site in the past. A leachate collection system was installed in FY01 to remedy a seep downgradient of the landfill. Recent engineering inspections have identified that the seep in the vicinity of monitoring well 95LS-02 has increased and additional investigation into the source of the seep was performed in FY03. The Motor Pool Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.



Michie Stadium Lot D Landfill

The Michie Stadium Lot D Landfill, which was part of the 6 Landfill Investigation Report, is located west of Michie Stadium; access is from Stony Lonesome Road. This two-acre landfill was active between 1956 and 1958. The pit and trench methods were used. The site is now used as a parking lot. The landfill is scheduled to be resurfaced in FY04. A perimeter drain has been installed. Although leachate seeps have been identified at this site in the past, recent engineering inspections have detected no seeps. The Michie Stadium Lot D Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.



LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Michie Stadium Lot F Landfill

The Michie Stadium Lot F Landfill, which was part of the 6 Landfill Investigation Report, is located southwest of Michie Stadium; access is from Stony Lonesome Road. This three-acre landfill was used primarily in 1965. The pit and trench methods were used. The landfill is closed and paved. The site is now used as a parking lot. Leachate seeps have been identified at this site in the past and a leachate collection system was installed in FY01. Currently, the system is being evaluated for effectiveness. A storm water upgrade project was completed in FY01. The Michie Stadium Lot F Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.



LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Post Exchange (PX) Landfill

The Post Exchange (PX) Landfill is part of the 10 Landfill Investigation Report and is a 2-3 acre landfill located under the parking lot at the former Post Exchange. This was the installation landfill for domestic waste during the 1940s. The pit and area methods of landfilling were used at this location. The landfill is closed, covered and partially paved. The landfill is scheduled to be resurfaced in FY06. A parking lot and the former PX service station now cover part of the site. Although leachate seeps were observed at this site in the past, recent engineering inspections have detected no seeps.



NYSDEC requested additional sampling of this site in March 1998. The additional sampling was performed and a supplement to the 10 Landfill Investigation was submitted to NYSDEC in Jan 00. The supplement recommended no further action at the Landfill based on sample results. No decision document was prepared because no remedial action was required. The PX Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Michie Stadium Lot A Landfill

The Michie Stadium Lot A Landfill is part of the 10 Landfill Investigation Report and is located west of Michie Stadium. This 0.6-acre landfill was used approximately from 1952-1954. The pit and trench methods were used. The landfill is closed and partially paved. A cap and drainage system improvements were constructed in FY02. The site is now used as a parking lot. Although leachate seeps were observed at this site in the past, recent engineering inspections have detected no seeps. Restoration of the landfill cap was completed in FY03.



LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Michie Stadium Lot B Landfill

The Michie Stadium Lot B Landfill, which was part of the 10 Landfill Investigation Report, is located west of Michie Stadium; access is from Stony Lonesome Road. This 0.3-acre landfill reportedly received refuse in 1954. The pit and trench methods were used. The landfill is closed and partially paved. A cap and drainage system improvements were constructed in FY02. The site is now used as a parking lot. Although leachate seeps were observed at this site in the past, recent engineering inspections have detected no seeps. Restoration of the landfill cap was completed in FY03.



LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Michie Stadium Lot C Landfill

The Michie Stadium Lot C Landfill, was part of the 10 Landfill Investigation Report and is located west of Michie Stadium; access is from Stony Lonesome Road. This 1.6-acre landfill was used approximately between 1955 and 1956. The pit and trench methods were used. The landfill is closed and partially paved. The site is now used as a parking lot. The landfill is scheduled to be resurfaced in FY04. Although leachate seeps have been identified at this site in the past, recent engineering inspections have detected no seeps.

A storm water upgrade project was completed in FY01 to reduce cap deterioration and manage storm water run-off to prevent infiltration of water into the landfill mass. The Michie Stadium Lot C Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site. LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.



Michie Stadium Lot E Landfill

The Michie Stadium Lot E Landfill, which was part of the 10 Landfill Investigation Report, is located west of Michie Stadium; access is from Stony Lonesome Road. This four-acre landfill was used approximately from 1952 - 1954. The pit and trench methods were used. The landfill is closed and partially paved. The site is now used as a parking lot. A cap and drainage system improvements were constructed in FY02. Leachate seeps have been identified at this site in the past and a leachate collection system was installed in FY01. Currently, the system is being evaluated for effectiveness.

A cap and drainage improvement design was initiated in FY 96 and was completed in FY99. A storm water upgrade project was completed in FY01. The Michie Stadium Lot E Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.



Professor's Row Landfill

The Professor's Row Landfill, which is part of the 10 Landfill Investigation Report, was used as a landfill in approximately 1954. The exact area of the fill site is unknown. Suspected sites are the Catholic Chapel and Jewish Chapel areas. Efforts to locate this landfill have been unsuccessful and no soil nor groundwater samples have been collected.

Morgan Farm Landfill

The Morgan Farm Landfill is part of the 10 Landfill Investigation Report and is located adjacent to Morgan Farm Road. This 2.5-acre landfill was used intermittently from the 1940s to the 1970s. The pit and area methods were used. The landfill is closed and partially vegetated. Leachate had been observed at this site. Based on results and recommendations of the initial RFI, the landfill was physically removed and consolidated into Cragston Landfill, which is undergoing RCRA Subtitle D closure.

High School Landfill

The High School Landfill, which was part of the 10 Landfill Investigation Report, is located on land deeded to the Town of Highlands School District (approximately five miles from the main post); access is from Morgan Farm Road and Route 9W. The landfill consists of two separate fill areas: (1) the playing field, west of the school building, and; (2) the track, southeast of the school building.



Although the landfill is located on land deeded to the Town of Highland Falls School District, USMA as Primary Responsible Party for disposal of waste at the landfill is required to maintain the site in the IRP LTM Program.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Camp Buckner Landfill

The Camp Buckner Landfill was part of the 10 Landfill Investigation Report and is located in the reservation area of the installation, at Camp Buckner. Access is from Patton Road, the main road into Camp Buckner, which intersects with Route 293. This 1.3-acre landfill was used in the 1970s and determined to be composed of construction and demolition debris. There are two small ponds north of the landfill; one is adjacent to the landfill and the other is approximately 150 feet from the landfill. The landfill is closed and covered with packed gravel and stone. The site is now used as a parking lot.



The Camp Buckner Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Village Farm Landfill

The Village Farm Landfill, part of the 10 Landfill Investigation Report, was located on Range 1 in the reservation area of the installation; access is from U.S. Route 9W. The landfill is less than two acres in size and was used from the 1950s to 1960s. The pit and area methods were used; wastes were also open-burned on the ground. A removal action was performed on this landfill in 1998 and the landfill material

was consolidated into the former Cragston Landfill. The landfill is closed and partially vegetated. The site is now used as a grenade training area. Leachate seeps were observed at this site prior to the removal action.

Washington Gate Landfill

The Washington Gate Landfill, which is part of the 4 Landfill Investigation Report, is located near Washington Gate, southwest of Building 917; access is from Washington Road. This 0.4-acre landfill was used in the early 1960s for disposal of construction debris. The pit and area methods were used. The landfill is closed and partially paved. A parking lot and a warehouse partially occupy the site.

Ammunition Supply Point Landfill

The Ammunition Supply Point Landfill, a part of the 4 Landfill Investigation Report, is located behind Building 1250, northwest of the commissary (Bldg 1200); access is from Stony Lonesome Road. Waste materials, including various metallic debris including a 55-gallon drum, 5-gallon cans and bed frames, were encountered in a test pit excavated as part of a construction feasibility study. The landfill is about one acre in size. The site is partially vegetated and not in use. Test pits revealed ceramic and glass debris. No soil contamination was observed. Groundwater samples from existing wells showed no signs of degradation of groundwater. No further response action planned pending review of the RFI by state regulatory agency

Motor Pool East Landfill

The Motor Pool East Landfill, which was part of the 4 Landfill Investigation Report, is located west of the Motor Pool Maintenance Buildings (Building 793/795). This 1.7-acre landfill was operated from 1964 to 1969 and reportedly received construction and demolition debris on its north side and sanitary waste on its south side.

The landfill was covered and paved in 2002. The site is now used as a parking lot by the Motor Pool. During construction of the cover, a leachate seep was observed emanating from the site. A cap and drainage system improvements were designed, constructed and completed in FY02. The Motor Pool East Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.

LTM and cap maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.



Bldg. 706 Parking Lot Landfill

The Bldg. 706 Parking Lot Landfill, was part of the 4 Landfill Investigation Report, is located next to Building 706 (Maintenance Facility); access is from Stony Lonesome Road. The period of usage is unknown but is probably in the 1952-1956 time frame, based on surrounding sites (Michie Stadium Lots A-C). The one-acre landfill is now closed and paved and as a parking lot. The landfill was resurfaced with asphalt in FY01. The Bldg. 706 Parking Lot Landfill has been included in USMA's Sampling and Analysis Plan for LTM and maintenance and groundwater sampling is conducted at this site.



LTM and maintenance will continue. In FY06, USMA will propose to regulators to reduce sampling frequency to every five years.

Skeet and Trap Range

The Skeet and Trap Range is located in the reservation area of the installation at Camp Buckner; access is from Patton Road. The site was used by the West Point Skeet and Trap Club from 1962 through 1992. Target fragments (clay pigeons) and lead shot have accumulated in a wetland. The field investigations were conducted as Phase I and Phase II of an RI in 1992 and 1994. Phase I of the RI found elevated levels of lead in the sediments and surface water in the wetland. Phase II of the RI generated data for use in a qualitative risk assessment that considered impacts of the contamination on waterfowl and other wildlife and on personnel entering the site. The site is no longer in use. A tributary crossing the site feeds into a West Point water source. Decision Document recommended LTM and natural attenuation. USMA routinely monitors the water quality in this tributary for lead on an annual basis and provides the results to the Orange County Department of Health.

Access deterrents (e.g. posting) will be installed and natural attenuation allowed to occur.

Crow's Nest Former Impact Area

The Crow's Nest Former Impact Area is located in the reservation area of the installation, north of the main post. Approximately one square mile, the site is bordered on the east and south east by Route 218; the west and southwest by Route 9W; and by Storm King State Park to the north. Crow's Nest was used as an artillery impact area from the Civil War to the late 1930s. The site, which is no longer in use, abuts a parkland where ordnance and explosive waste (OEW) have been found. A limited site survey in 1994 located 75 suspect OEW. A DA Safety Team Survey rated the site a Risk Assessment Code (RAC) II, hence dropping its funding priority. In 1994, only RAC I sites were eligible for Defense Environmental Restoration Account (DERA) funding. In 1999, forest fires in the area detonated over 30 old artillery rounds. The fires and ordnance closed Rte 218, Rte 9W, and severely hampered firefighters ability to contain the blaze. The fires refocused attention on the Crow's Nest site that resulted in funding for USMA to conduct a limited investigation of the area behind Lee Housing. USMA conducted a geophysical investigation of the area adjacent to and south of Crow's Nest from Lee Gate to the DHPW lumberyard. The investigation identified ordnance related items on the surface and many buried metallic

items that were not investigated due to funding and safety constraints. USMA also conducted a surface clearance of the fire break along the USMA/Park boundary, the dirt road from Rte 9W to the TV relay tower atop Crow's Nest, and the gas line along the south west edge of Crow's Nest. After the fires, the adjacent park property was designated a FUDS site. In 2000, trails and parking areas in the park were cleared of OEW.

An Engineering Evaluation/Cost Analysis (EE/CA) was completed in July 2002 for the FUDS site. The EE/CA recommended a subsurface clearance of the park adjacent to Crow's Nest. An estimated remediation cost of \$5-7 million was stated in the EE/CA. The EE/CA also recommended that USMA install a fence along the Crow's Nest/Park boundary.

UST Removal Projects

Eleven abandoned underground storage tanks (USTs) at the Stewart Army Subpost (STAS) and three abandoned USTs at West Point were removed or closed in place during April-May 1994. No further action required pending review of closure plans by NYSDEC.

UST Removal Project at Building 505

The 275 and 1000-gallon fuel oil tanks at this building were removed in April 1994. The tanks were over 30 years old. Forty-five cubic yards of soil was excavated and disposed of as part of the removal. The closure report for the tanks has been submitted to NYSDEC and no further action is anticipated.

Cragston Landfill

Cragston Landfill is a five-acre formerly permitted Sanitary Landfill that was initially include in the IRP. It was found to be ineligible for DERA funding because it was still operational after 1986. The Cragston Landfill is a formerly permitted sanitary landfill undergoing RCRA Part D closure. Therefore, this site is not eligible for IRP funding and no further action is required under IRP.

ATTACHMENT 2

CONSTRUCTION PROJECT NOTICE

**Department of the Army
UNITED STATES MILITARY ACADEMY
West Point, New York 10996**

SUBJECT: DHPW Construction Project Notice

PROJECT:

The Department of Housing and Public Works (DHPW) is planning to accomplish this project as part of the West Point revitalization program. We appreciate the cooperation of the community and will work hard to minimize any resulting inconvenience. Important details about the project of which you should be aware are provided below:

CONSTRUCTION CONTRACTOR:

CONTRACT NUMBER:

CONTRACTING OFFICER:

DESCRIPTION OF WORK:

STATUS:

IMPACT ON RESIDENTS/COMMUNITY:

RESPONSIBILITIES OF RESIDENTS/COMMUNITY:

CONSTRUCTION STAGING AREA:

UTILITIES:

CONTRACTING OFFICER'S REPRESENTATIVE:

POINT OF CONTACT: Members of the Community should pass any concerns through their mayor or area coordinator. If you have questions about the project, please contact the DHPW Customer Service Representative, Martha Hinote, at 938-4407.

ATTACHMENT 3

RESTORATION ADVISORY BOARD INFORMATION

The United States Military Academy (USMA) has a relatively small installation restoration program without significant issues that warrant the establishment of a Restoration Advisory Board (RAB). The West Point community consists of approximately 10,196 military personnel and their family members, civilian personnel and cadets. The Town of Highlands, which adjoins West Point to the south has a population of 13,600.

During the investigation phase of an off-post landfill on the Village of Highland Falls property in 1994, initial communication led to a project briefing to the school board concerning the impact on O'Neill High School. The presentation offered the reasons for performing the investigation, described the field techniques and addressed the board members' questions and concerns. The presentation was well received and established an excellent working relationship with the school board. Notification to the school board of subsequent remedial activities was provided through telephone calls, information papers and informal meetings.

Community Relations Councils have been formalized where any future planned remedial actions can be presented. Because of regulatory reasons, USMA and the local community have separate councils. They do meet together, but the distinction of two groups is important. The Engineering/Public Works Subcommittee of the Community Relations Councils is chaired by the USMA Director of Housing and Public Works and consists of local village and town officials, and interested citizens. This committee provides the ideal forum for presenting planned remedial activities that could affect the community without establishing a RAB. The West Point and Town of Highlands/Village of Highland Falls Community Relations Councils provide venues to present plans for future remedial actions. The Engineering/Public Works Subcommittees consist of representatives from West Point and the civilian community. Their joint meeting provides a forum to discuss activities that could affect the community without establishing a RAB

On post, West Point has established residential Mayor's Meetings. Each residential area has an elected mayor who represents that community's interest and conveys its concerns to local command. These community meetings also provide an excellent forum to present and discuss future remedial activities that may affect the local community. The availability of these two operating public forums and the limited remedial actions planned at USMA limit the need to establish a RAB at West Point.

ATTACHMENT 4

ACRONYMS, ABBREVIATIONS AND DEFINITIONS

AEHA Army Environmental Hygiene Agency (currently Center for Health Promotion and Preventive Medicine [CHPPM])

CERCLA Comprehensive Environmental Response, Compensation, and Liabilities Act

CMI Corrective Measures Implementation

CMS Corrective Measures Study

DD Decision Document: an agreement to carry out an action.

DERA Defense Environmental Restoration Account: an account used to fund DoD environmental cleanup activities.

DERP Defense Environmental Restoration Program: program for environmental clean-up of DoD facilities.

DES Design: remedial design under RCRA

DoD Department of Defense

DPM Defense Priority Model: a rating from 0.00 to 99.9 that represents the relative risk to human health and the environment, based on contaminant pathway, hazard, and receptors.

DSERTS Defense Site Environmental Restoration Tracking System: the DSERTS software application supports Army DERP management and automates data collection. DSERTS provides information to DoD and RMIS for reporting to Congress.

EPA U.S. Environmental Protection Agency

IAP Installation Action Plan

IRA Interim Remedial Action: the clean-up activity status, which includes removal and clean-up actions taken prior to decision on the final clean-up.

IRP Installation Restoration Program

LTM Long-Term Monitoring: the continuous sampling and analysis of sites.

NFRAP No Further Response Action Planned: indicates that the restoration process is complete and that the required regulatory agencies have been notified.

NPL National Priority List: the prioritized list of sites to be remediated established by the EPA.

NYSDEC New York State Department of Environmental Conservation

OB/OD Open Burn/Open Detonation

OEW Ordnance and Explosive Waste

PA Preliminary Assessment

POL Petroleum, Oil and Lubricants

RA Remedial Action: an action that involves the construction, operation, and implementation of the final clean-up remedy or remedies.

RAC Risk Assessment Code

RA(C) Remedial Action (Construction)

RA(O) Remedial Action (Operation)

RC Response Complete: the date, year and, month on which the restoration process is considered complete and by which all required regulatory agencies have been notified.

RCRA Resource Conservation Recovery Act

RD Remedial Design: the development of the final design for the selected clean-up, including the preparation of technical drawings and specifications needed to implement the clean-up action.

REM Removal

RFI Remedial Facility Investigation

RI/FS Remedial Investigation/Feasibility Study: a study undertaken to determine the nature and extent of the contamination at a site. Based on the RI data, options for the final clean-up actions are developed and evaluated in the FS.

RIP Remedy In Place

RMIS Restoration Management Information System

RRSE Relative Risk Site Evaluation: Comparative categorization of installation sites relative risk codes: NE-not evaluated; 1-high; 2-medium; 3-low; B-no agreement

SARA Superfund Amendments and Reauthorization Act: this act establishes standards for clean-up activities and also stipulates the conditions for off-site disposal of waste

SC Site Closeout: indicates the date when site response complete concurrence was obtained from regulatory agencies.

SI Site Inspection: on-site validation and collection of additional data to categorize the contaminant sources and determine whether the contaminants are being released into the environment.

STAS Stewart Army Subpost

STR Skeet and Trap Range

SWMU Solid Waste Management Unit

TBD To Be Determined

USAEC U.S. Army Environmental Center (formerly USATHAMA)

UST Underground Storage Tank

DEFINITIONS

SANITARY LANDFILL: Landfill that received the mix of non-hazardous solid waste normally generated by municipalities or military installations. Unless otherwise indicated, landfills discussed in this report were sanitary landfills.

CONSTRUCTION AND DEMOLITION (C&D) LANDFILL: Landfill that received only debris from construction or demolition projects.

ORGANIC COMPOST LANDFILL: Landfills that received exclusively grass, tree trimmings and other green or yard waste.

LEACHATE SEEP: Area of orange discoloration of groundwater that is expressed on the ground surface. Orange discoloration of groundwater is the result of the leaching of constituents (primarily iron from subsurface waste material (e.g. refuse) in contact with the groundwater. Where problematic at USMA IRP Landfills (e.g. Michie Stadium Lot F Landfill, Motor Pool East Landfill, Ski Slope Landfill and Post School Landfill) leachate collection systems have been designed and constructed to effectively mitigate the problem.