



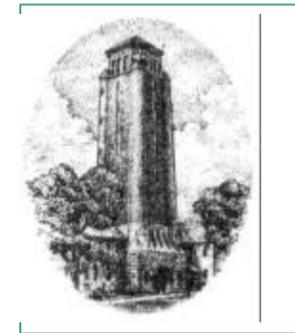
**Figure 3. Conceptual View of Landfills 6 & 7 (post construction)**

Environmental Coordinator  
 3155 Blackhawk Drive, Suite 17  
 Building 379, Suite 17  
 Fort Sheridan, IL 60037

Address Correction Requested

Stamp

Visit the NEW Fort Sheridan web site for current information about environmental cleanup and community involvement activities. The web site will be updated as information becomes available.  
 The web site address is [www.kemron.com/ftsheridan.html](http://www.kemron.com/ftsheridan.html).



# Environmental Update

## Fort Sheridan Environmental Restoration Program

Quarterly Newsletter

April 2002

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### Site History

Fort Sheridan was an active U.S. Army installation established in 1887 to maintain civil order after the Great Chicago Fire in 1871 and labor strife in the 1880s. It was closed under the Base Realignment and Closure (BRAC) program in 1993. Since then, the Army has made significant accomplishments in cleaning up environmental contamination from past activities at Fort Sheridan. In 1997, approximately 406 acres of the 712 total acres that comprise Fort Sheridan were transferred to the surrounding communities for residential development. Cleanup of this area included closure of two landfills and removal of all known underground storage tanks (UST). A large portion of this area is now the Town of Fort Sheridan residential development, which has preserved several historic landmarks of the Fort's past.

Army efforts currently focus on the environmental restoration of approximately 100 acres of Fort Sheridan that were transferred to the U.S. Army Reserve and approximately 206 acres that were transferred to the U.S. Navy.

Studies were conducted on the Army Reserve and Navy properties to identify the nature and extent of potential contamination, and to determine specific risks posed to human health and the environment by these properties. A total of 44 areas were studied; 36 of these areas were found to pose no significant risks to human health or the environment and are being considered for "no further action" by U.S. Environmental Protection Agency (EPA) and Illinois EPA. The remaining 8 areas are the subject of the current environmental restoration program and include Landfills 6 and 7 for which an interim remedy has been designed and will be implemented in 2002.

*The Army is following the requirements of the Base Realignment and Closure (BRAC) program, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and other federal requirements to protect human health and the environment at Fort Sheridan.*

## Making Progress Toward Environmental Cleanup

The Army is using a **guaranteed fixed-price remediation (GFPR)** contract to facilitate environmental cleanup of the remaining areas at Fort Sheridan. The Army has found this approach to be effective at many of its installations throughout the country including installations in Rio Vista, California; Pedricktown, New Jersey; Hingham, Massachusetts; Lompoc, California; Fort Pickett, Virginia; and Devens, Massachusetts. The benefits of using a GFPR contract approach include:

- Faster, more efficient cleanups
- Lower overall costs to the Army
- No unforeseen project delays

In September 2001, the Army Forces Command (FORSCOM) awarded the Fort Sheridan GFPR contract to KEMRON Environmental Services Inc. (KEMRON) and its team of environmental consultants and contractors, including Tetra Tech EM Inc. and Geo-Con. Collectively, these three firms have experience with large cleanup projects for both government and private clients. KEMRON maintains a local office at Fort Sheridan and is responsible for overall program management and technical concerns. Tetra Tech EM Inc. maintains two offices in the Chicago area and is responsible for providing regulatory, community involvement, and engineering design support. Geo-Con will establish a construction office at Fort Sheridan and is responsible for providing construction support.

Table 1 on the next page summarizes the status of the remaining environmental work at Fort Sheridan, including the 8 environmental restoration areas and additional work tasks required for overall site closure (also see Figure 1, below). Each area must be cleaned up in accordance with state and federal requirements that would result in approval and concurrence from Illinois EPA and U.S. EPA that no further action is needed. In addition, the Army will review and update the installation's groundwater monitoring program, removing unused monitoring wells and establishing new wells as needed.



Figure 1. Site Map

- KEY:**
- 1 Landfill 1
  - 2 Landfill 5
  - 3a Landfill 6
  - 3b Landfill 7
  - 4 Coal Storage Area (CSA) 3
  - 5 CSA 4
  - 6 Water Tower
  - 7 Building 70
  - 8 Vehicle Equipment Storage (VES) Area 8
  - 9 Building 208
  - 10 Landfill 2

**A 30-day public comment period was held on the proposal for expedited action at CSA4, Water Tower Soil, VES 8, and Building 70. The comment period ended on February 25, 2002, and a final decision is pending. The Army will review and respond to all comments and document its final decision in an action memorandum.**

## Planned Community Involvement Activities

The Army is committed to keeping residents informed about the cleanup activities at the Fort Sheridan site. The EC is the Army's principle field representative responsible for day-to-day cleanup activities at Fort Sheridan. The EC coordinates efforts between other installation staff, such as the Navy and Army Reserves staff, oversees all contracts for cleanup-related activities, and is the Army's primary on-site point of contact for all community involvement activities.

Ongoing communication activities will include the Fort Sheridan EC attending Town of Fort Sheridan Development Master Homeowners' Association meetings; RAB meetings; and Lake Forest, Highwood, and Highland Park city council or other appropriate committee meetings. The Army also plans to schedule a poster session and site walk-through in conjunction with construction at Landfills 6 and 7, and will conduct informational sessions periodically to keep the community informed of cleanup progress, answer questions about ongoing work, and obtain information about community perceptions and concerns.

Anyone interested in learning more about environmental cleanup or scheduled community involvement activities is encouraged to contact the EC, review the administrative record at Fort Sheridan, visit the public library information repositories listed below, or visit the new Fort Sheridan website at [www.kemron.com/ftsheridan.html](http://www.kemron.com/ftsheridan.html).

<b>ENVIRONMENTAL COORDINATOR AND ADMINISTRATIVE RECORD</b>			Tim Janss Fort Sheridan Environmental Coordinator 3155 Blackhawk Drive Building 379, Suite 17 Fort Sheridan, IL 60037 Telephone: (847) 266-6323 Fax: (847) 266-3584 Email: <a href="mailto:sheridanbec@ameritech.net">sheridanbec@ameritech.net</a>
<b>INFORMATION REPOSITORIES</b>			
Highland Park Library 494 Laurel Avenue Highland Park, IL 60035 Telephone: (847) 432-0216	Highwood Public Library 102 Highwood Avenue Highwood, IL 60040 Telephone: (847) 432-5404	Lake Forest Library 360 East Deerpath Lake Forest, IL 60045 Telephone: (847) 234-0636	

If you would like to be added to the Fort Sheridan site mailing list, or if you wish to be removed from the mailing list, please mail, e-mail, or fax your name and address to the Fort Sheridan Environmental Coordinator.

**Name:** \_\_\_\_\_  Please take my name off the mailing list.

**Address:** \_\_\_\_\_

\_\_\_\_\_

**City:** \_\_\_\_\_

**State:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_

**Please pass this coupon along to a friend or neighbor!**



## Landfill Cap and Its Role in Protecting Human Health and the Environment

When a landfill is no longer used for waste disposal purposes, it must be closed in a way that protects human health and the environment. If it is not properly closed, water in the form of rainfall or snow could seep through soil and contact landfill wastes. Depending on physical and chemical properties, waste contaminants can then dissolve in the water. Water containing landfill waste contaminants is called *leachate*. Leachate can then percolate through soil and contaminate groundwater or nearby surface water bodies. A leachate collection system is a series of drain pipes and sump pumps designed to collect leachate from the landfill. Collected leachate is pumped out of the landfill to storage tanks prior to treatment and discharge. One of the primary goals of landfill closure is to minimize leachate.

A properly designed and well-maintained landfill cap minimizes the leaching of contaminants from buried wastes by restricting water infiltration. Landfill caps promote surface drainage and allow better capture of any landfill gases produced as a result of biodegradation of buried wastes. Caps physically separate buried wastes from environmental influences and maintain the physical integrity of the landfill. Without a cap, landfill wastes could become exposed to the atmosphere and cause environmental problems.

Landfill caps consist of a combination of layers of materials that minimize water infiltration and collect gases. Each layer serves a different purpose and is designed to perform a specific function in protecting human health and the environment. Each layer and its function are briefly described below. Figure 2 shows a schematic representation of a landfill cap.

**Top layer.** This layer consists of vegetated topsoil. It minimizes erosion and maximizes the loss of water from the soil through evaporation and through the growth of the vegetation itself.

**Protective layer.** This layer consists of a mixture of compacted clay and granular material. It protects underlying layers from freezing during winter and dry out during summer.

**Drainage layer.** This layer consists of a thick, manufactured product called “composite geonet.” It drains away water that may have infiltrated through the top two layers. The water drains off the cap into the local storm water system.

**Geomembrane liner.** This liner consists of low-density polyethylene. It serves as the primary barrier to water infiltration to the buried wastes.

**Geosynthetic clay liner.** This secondary liner consists of high-quality bentonite clay and appropriate binding material. As the clay absorbs water, it becomes putty-like and very resistant to water infiltration.

**Gas-venting layer.** This layer collects gases that are naturally produced when wastes biodegrade (or “break down”) through natural processes. The gas is collected under vacuum from a mechanical blower system and processed through a controlled flare.

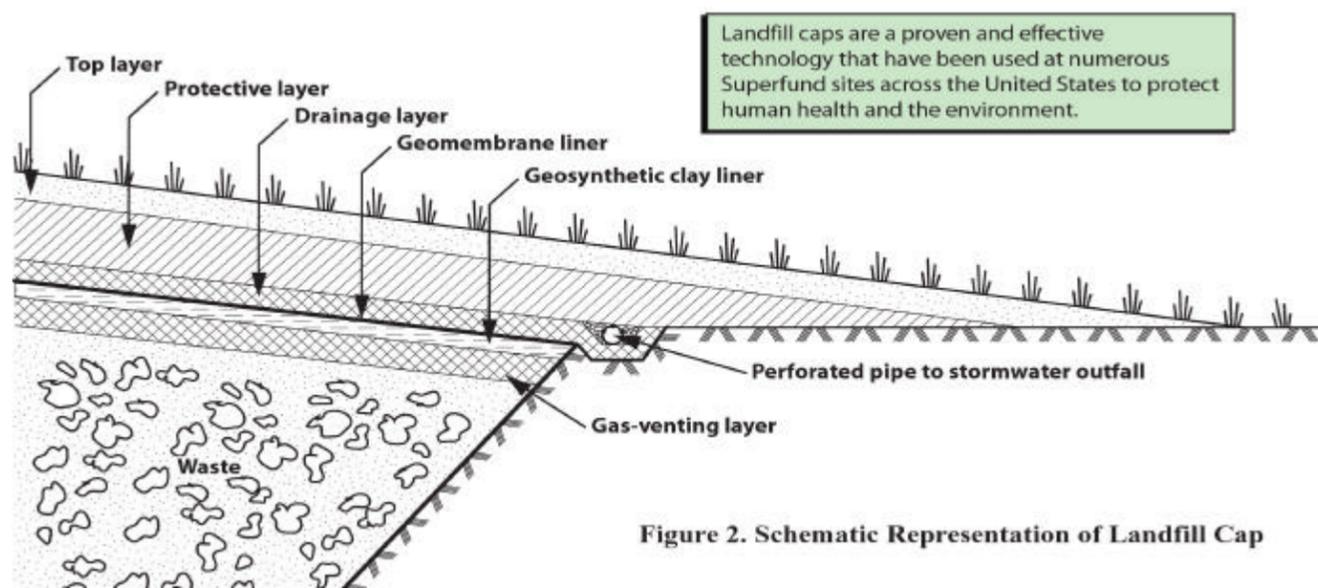


Table 1. Fort Sheridan Environmental Task Areas			
Location	Description	Contaminants of Concern	Cleanup Status
Landfill 1 Army Reserve Property (North)	Used for disposal of general refuse during the early 1940s. Landfill material extends off-site through the Army Reserve property. Material was disposed in a ravine tributary that leads to Janes Ravine.	Lead, arsenic, and benzo(a)pyrene (BAP) found in landfill waste.	Cleanup options to eliminate potential risks are being evaluated. The Army will issue a proposed cleanup plan for public comments. U.S. Army Reserves to implement cleanup work, if necessary.
Landfill 5 Navy and Army Reserve Property	Used for disposal of general refuse including fill and construction debris from about 1900 through the 1960s. Site is currently used for vehicle and equipment storage and shop activities; majority of this site is paved with asphalt or concrete and enclosed with fences.	Polycyclic aromatic hydrocarbons (PAHs) and metals found in landfill waste.	Cleanup options to eliminate potential risks are being evaluated. The Army will issue a proposed cleanup plan for public comments. GFPR contractor to implement cleanup work, if necessary.
Landfills 6 & 7 Navy and Army Reserve Property	Used for disposal of industrial and domestic wastes along with debris from demolition of several World War II barracks in the 1960s; Landfill 6 was operated in the 1960s, and Landfill 7 was operated between late 1940s and 1979.	Combined total of waste products is estimated between 380,000 and 460,000 cubic yards. The landfills currently produce leachate that may contain metals concentrations above surface water quality standards.	An interim cleanup remedy was selected and documented in 1997. GFPR contractor will construct a multi-layer cap to reduce potential risks to humans and the environment, in accordance with the approved remedial design by U.S. Army Corps of Engineers. The final remedy will be determined upon completion of the cap construction.
Coal Storage Area 3 Navy Property	Coal used by the Army for industrial heating purposes stored in an uncovered pile at this location, above a debris-filled branch of Bartlett Ravine.	PAHs found in subsurface soils; contaminated soil and most debris removed in 1999; some nonhazardous debris remains.	A proposed cleanup plan addressing remaining debris being prepared and will be issued for public comment. GFPR contractor to implement cleanup work, if necessary.
Coal Storage Area 4 Navy Property	Coal used by the Army for industrial heating purposes stored in an uncovered pile at this location until approximately 1962.	PAHs, including BAP and benzo(b)fluoranthene found in surface soils.	Army has proposed an expedited action to remove the soil contamination, with the goal of achieving risk levels that are considered acceptable for residential property use. GFPR contractor will implement soil excavation and removal activities, if approved.
Water Tower Soil Army Reserve Property	Steel water storage tank 121 feet high and 41 feet in diameter; surface of tower is coated with lead-based paint; sand-blasting activities to remove the lead-based paint have resulted in lead based paint contamination in the soils below the tower.	Lead found in surface soils.	Army has proposed an expedited action to remove the soil contamination, with the goal of achieving risk levels that are considered acceptable for residential property use. GFPR contractor will implement source removal and soil excavation and removal activities, if approved.
Building 70 Army Reserve Property	Used as a warehouse for various materials including pesticides and herbicides.	Arsenic detected in surface and subsurface soils around Building 70.	Army has proposed an expedited action to remove the soil contamination, with the goal of achieving risk levels that are considered acceptable for residential property use. U.S. Army Reserves will implement soil excavation and removal activities, if approved.
VES Area 8 Navy Property	Open area south of Landfill #6 that was used to store equipment and various materials including construction debris.	Soil samples indicated the presence of PAHs in the surface soils	The Army has proposed an expedited action to remove the soil contamination, with the goal of achieving risk levels that are considered acceptable for residential property use. GFPR contractor to implement soil excavation and removal activities, if approved.
Underground Storage Tanks (UST) Site-Wide	All known USTs, totaling 46, have been removed and disposed of during the environmental restoration activities at Fort Sheridan.	Typical contaminants found were petroleum related. If UST had leaked, surrounding soil may have been contaminated with product.	GFPR contractor to remove any presently unknown USTs found during restoration or redevelopment efforts; excavation to be backfilled with clean soil as needed.
Building 208 Navy Property	UST removals were conducted at former Building 208 motor pool. Petroleum-contaminated soil was removed; however, residual soil contamination remains.	Benzene found in subsurface soils.	GFPR contractor to remove remaining petroleum-contaminated soil; excavation to be backfilled with clean soil.
Landfill 2 Town of Fort Sheridan Development Co.	Used for disposal of general refuse including fill and construction debris. Small arms firing ranges were identified at this location.	Results of unexploded ordnance (UXO) investigation did not indicate the presence of UXO on Landfill 2.	Prior cleanup work included surface (2 foot) exploration and removal of UXO. GFPR contractor to develop future use restrictions in Land Use Control and Implementation Plan (LUCIP).

## Community Interviews

In December 2001 and January 2002, the Army conducted a community involvement assessment of the communities surrounding Fort Sheridan to identify current concerns and determine the effectiveness of the Army's communication efforts. Approximately 128 individuals from Lake Forest, the Town of Fort Sheridan Development, Highwood, and Highland Park communities were identified as potential interview candidates. A total of 22 residents accepted the offer to be interviewed. Concerns and overall observations expressed during the interviews are summarized below.

### Time Frame for Cleanup

- Residents expressed concern about the amount of time that has elapsed between site investigation and cleanup activities in the 1980s and 1990s and current activities.
- Residents want the Army to quickly proceed with plans to complete environmental cleanup of the property.

### Land Reuse

- Interviewees said that the property is valuable and should be developed for public use, such as tennis courts, baseball and soccer fields, open parks, or parking areas.

### Beach Access

- Access roads to beaches in the northern and southern portions of the site have been closed, and residents have not been given explanations for the closure. Residents expressed confusion about who is responsible for beach access to Lake Michigan.
- The beaches are not cleaned on a regular basis. Although this issue is not related to environmental cleanup activities, most residents believe that this cleanup is an Army and Navy responsibility.

### Landfill Cap for Landfills 6 and 7

- Although most residents believed a clay cap is the best solution for the contaminated landfills, many asked if the technology was "fool-proof" and if contamination would seep through to the soil and groundwater.

### Traffic Issues

- City officials voiced concern over the potential increase in truck traffic and traffic congestion on Sheridan Road when cleanup activities begin in Spring 2002.
- City officials want the Army to develop a traffic plan with input from surrounding communities before cleanup activities begin.

### Communication Efforts

- Residents and local officials said they would welcome a renewed effort by the Army to communicate with the community.
- Some stated that currently there is no meaningful dialogue between the Army, Navy, and community.
- In addition to public meetings and information sessions, residents would like to see a more regular distribution of fact sheets, newsletters, or other updates to the community.

\* \* \* \* \*

## Fort Sheridan Restoration Advisory Board

The Fort Sheridan RAB was formed to provide a forum for representatives of the Army, regulatory agencies, and community to discuss and exchange information about future land uses, environmental investigations, and cleanup work at Fort Sheridan. The RAB was created in the mid-1990s to involve the community in the cleanup process. Members of the Lake Forest, Highwood, and Highland Park communities serve on the RAB, as well as representatives from Illinois EPA, U.S. EPA Region 5, and the Fort Sheridan BRAC Division.

Since 1995, there have been 52 RAB meetings. The most recent meetings were held on February 7 and April 11, 2002. Transcripts and summaries of the most recent RAB meetings are available for public review in the public information repositories (see page 7 of this newsletter).

## Top Five Questions

The five questions below were identified as the most frequently asked questions by area residents. Each question is followed by an Army response.

*Q: What are the anticipated future uses of the cleaned up sites?*

A: The Navy and Army Reserves will continue to use the land for both industrial and residential (base housing) purposes. Landfills 6 and 7 will be used as open space for base housing personnel; these areas may be developed as public recreational facilities (such as a soccer field or jogging path) if community interest is sufficient. (See Figure 3, which is a conceptual drawing of the completed Landfills 6 and 7 area.)

*Q: Why are the access roads to the beach in the northern and southern portion of the site closed to the public?*

A: The Lake County Forest Preserve owns the land in the northern portion of the site and is currently developing a plan detailing the possible long-term uses of the area. Currently, the road to the north part of the beach remains closed. For any further information, contact Dan Prezell, Lake County Forest Preserve at (847) 367-6640. The Navy controls the southern beach area and access to this area.

*Q: What will be done to prevent contaminants in Landfills 6 and 7 from leaking into Lake Michigan?*

A: Leachate collection is currently being conducted as part of the interim remedy for the landfills. (The next section discusses leachate and the landfill cap.) Following completion of the final cap, the amount of leachate produced is expected to be reduced because the cap will prevent surface water infiltration. In addition, the cap and leachate collection system will be inspected on a regular schedule, and system modifications or repairs will be made as necessary.

*Q: What will be done to prevent traffic congestion during cleanup activities?*

A: The Fort Sheridan Environmental Coordinator (EC) recently met with local officials to review planned and ongoing site activities and to initiate discussion to develop traffic schedules that meet community needs. A traffic plan is under development.

*Q: How will cleanup progress be communicated to the community?*

A: Cleanup progress will be communicated through a variety of methods, including (1) public meetings and information sessions (including RAB meetings) that will be advertised in local newspapers and newsletters; (2) fact sheets and newsletters mailed to local residents, officials, organizations and businesses; (3) local information repositories located at the Highland Park, Highwood, and Lake Forest libraries; and (4) the Fort Sheridan web site: [www.kemron.com/ftsheridan.html](http://www.kemron.com/ftsheridan.html)

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## Earth Day Spring-Cleanup

Volunteers from the Town of Fort Sheridan Development are planning spring-cleaning on Earth Day, Saturday, April 20, 2002. Areas that need a simple sprucing up include common areas of the residential portion of Fort Sheridan, such as the main entrance and the parade grounds. Volunteers will perform light cleaning of beach areas.

Volunteers will meet at the historic water tower on Saturday at 10:00 a.m. Those interested in participating will be supplied with gloves and bags to collect small debris, such as papers, bottles, and other unsightly garbage. The cleanup should take only a few hours. No large equipment will be used.

For more information, please call the communication coordinator for the Fort Sheridan Masters' Homeowners Association, Krista Hanson, at (847) 681-9775 or Gary Cohn at (847) 777-4567. More information concerning this and other events can be obtained at [www.FortSheridan.org](http://www.FortSheridan.org).