SITE DESCRIPTION

The 9065-acre Sunflower Army Ammunition Plant is a government-owned, contractor-operated military installation. The installation began operations in 1942 to manufacture smokeless powder and propellants for small arms, cannons, and rockets. Additional facility operations included the manufacture and regeneration of nitric and sulfuric acids, and munitions proving. Since 1971, the majority of the installation has been in a standby, inactive status, with the last production stopping in 1992. Many of the undeveloped areas of the property are currently leased for livestock grazing and hay production. Known or suspected contamination at the facility is located in the former production line areas, magazine storage areas, and approximately 54 solid waste management units (SWMUs). The SWMUs include surface impoundments, ditches, sumps, munitions proving ranges, burning grounds, and landfills. Throughout operational history, various liquid discharges from the facility have been permitted under the federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES).

The facility owner (Department of the Army) declared the installation excess during early 1998, and the facility operator (Alliant Techsystems, Inc.) is in the process of removing the majority of the industrial infrastructure remaining at the site, including explosives contaminated structures and equipment. Future use of the installation is uncertain, although efforts are underway to facilitate development and reuse of available land, buildings, and usable infrastructure. A wide variety of projects have been considered, including single- and multi-family residences, parks, small business, light industry, and manufacturing. Currently, the United States General Services Administration is negotiating transfer of the entire site to the Kansas Statewide Department Cooperation, who would in turn transfer the site to a third party developer, OZ Entertainment Corporation (OEC), would cleanup and redevelop the site, including its proposal for a destination theme park, golf course, trailer camp ground and hotel.

Surrounding land use is primarily agricultural, although urban growth is encroaching. The facility
is situated on a broad ridge, with most of the installation lying between two streams: Captain Creek on the west and Kill Creek on the east. The state of Kansas has designated Kill Creek as a fishery downstream of the installation, and the creek is a tributary of the Kansas River, a state designated drinking water supply. The federal endangered Pallid Sturgeon (Scaphirhynchus albus) occurs in the Kansas River, Kill Creek, and Captain Creek are habitat for the state threatened Flathead Chub (Hybopsis gracilis). EPA included the facility in the February 13, 1995, Federal Register notification of proposed additions to the National Priorities List (NPL), having received a score of 50 through the Hazard Ranking System (HRS) based on the surface water exposure pathway.

Sunflower Army Ammunition Plant was issued a Resource Conservation and Recovery Act (RCRA) hazardous waste storage permit on September 30, 1991. That permit consist of two parts. Part I is issued by the Kansas Department of Health and Environment to authorize the storage of certain hazardous wastes for greater than 90 days. Part II is issued by EPA for regulations which KDHE has not been authorized to implement in lieu of EPA such as those requiring investigation and cleanup of releases of hazardous waste and hazardous constituents from solid waste management units. EPA believes these requirements in Part II of the RCRA permit are sufficient to cleanup the site.

The Sunflower Army Ammunition Plant was proposed for listing on the NPL on February 13, 1995. The site did not proceed to final listing because of a policy requirement to seek feedback from the state in the form of a letter from the governor indicating the state's opinion on the listing of a site on the NPL. In the discussions between the EPA and the state environmental officials, it was indicated that the state would not support the listing of SAAP on the NPL. The urgency for listing was also diminished because good progress toward investigation and cleanup of the SAAP facility was proceeding under the corrective action provisions of a RCRA permit held by the facility since 1991. At this time, the agency was also moving toward making Superfund federal facility requirements equivalent to private party cleanup requirements where deferral of NPL listing to RCRA authority was allowed. EPA ensured that the actions taken at SAAP met the requirements of Superfund in addition to the RCRA corrective action requirement to ensure a Comprehensive Environmental Compensation and Liability Act (CERCLA) -like response to site conditions.

The EPA policy revisions in 1997, allowed the deferral of federal facility NPL listing to RCRA corrective action authority as long as: 1) EPA, the state, and the facility (Department of the Army) agreed to the deferrals; 2) Sufficient progress was being made to clean up the facility; and 3) the community was accepting of the deferral. The EPA, Kansas, and the Army all supported the deferral; and excellent progress, within budget limitation, was taking place on site investigation and cleanup activities under the permit. Also, a site repository, accessible to the public was established to house site studies and other site-related documents and public notice of site activities and decisions and the availability of documents for review and comment became a regular site activity. The deferral of the NPL listing decision was continued as a result of the above information.

Site Responsibility:

NPL LISTING HISTORY
These actions are required by the RCRA hazardous waste management permit issued by EPA.

| Proposed Date: | 02/13/95 |
| Final Date:    |          |
| Deleted Date:  |          |

THREATS AND CONTAMINANTS

Data gathered through site investigations to date have documented elevated concentrations of one or more of 89 separate chemicals of potential concern in soil, sediment, ground water, surface water, and various biological receptors. Source areas are categorized as: N-5 Propellant Production site (11), Nitroguanidine Production sites (12), Landfill sites (6), Waste Treatment sites: Propellant Wastes (6) other wastes (6) Support Area sites (8), and Single Base Propellant Area (1) unit consisting of multiple sumps. A Grazing Study identified dioxins/furans in surficial soil and vegetation in non-solid waste management unit areas, some of which were included in current agricultural leases. Although analysis of these data and modeled concentrations in beef indicated little to no appreciable risk from this pathway, cattle no longer are allowed to graze in these areas.

CLEANUP APPROACH

Response Action Status
Immediate Actions: The EPA, under the authority of the Resource Conservation and Recovery Act (RCRA), has been monitoring groundwater, periodically inspecting and maintaining the facility, and developing a RCRA Facility Investigation. The Army, under its Superfund Authority pursuant to Section 104 of CERCLA as delegated to the Department of Defense by Executive Order 12580 (59FR2923, January 23, 1987), has been burning explosives contaminated structures.

Entire Site: The Army has begun a study of the nature and extent of the contamination throughout the site. This study will define the various areas of contamination and to develop appropriate cleanup alternatives for each area. Four solid waste management units have had all investigations completed (SWMUs 10,11,22 & 32). EPA has selected a corrective action for these areas. Readers are referred to the Statement of Basis, dated September 28, 1999 for a discussion of these areas and EPA's corrective measure and the Final Corrective Measure Decision dated April 7, 2000.
Site Facts: In 1971, the EPA levied a fine against the facility for the accidental release of ammonia to Kill Creek that resulted in a fish kill. Sunflower Army Ammunition Plant is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate and control the migration of hazardous contaminants at military and other DOD facilities.

ENVIRONMENTAL PROGRESS

A significant amount of progress has been made regarding the investigation of contamination at SFAAP. Of the 54 SWMUs identified at the facility, draft RFI reports have been submitted for all of these units. Review of the documents submitted to date has facilitated the resolution of ten draft RFI reports and the development of recommendations for further action or no action at each of these units. In addition, several site-wide efforts include a background soil investigation report, a groundwater/geological/hydrological investigation report, an ecological risk assessment report, a grazing study report, and the general approach for human health risk assessment. Further investigation is required at a number of units, and the facility is pursuing funding to accomplish these activities. Cleanup progress at several units have been accomplished through interim measure (removal) and RCRA closure activities. SWMUs 28 and 29 were closed as RCRA regulated units prior to 1995, and SMWU 23 will be closed during 2000. SWMUs 13 and 37 were closed during 1996 in cooperation with the KDHE Bureau of Water. At SWMU 50, an interim measure implemented during 1997, which applied a presumptive remedy for landfills, will likely result in final closure of that unit in 2000. As the facility moves into an excess status owing to the withdrawal of its mission, the applicability of section 120(h) of CERCLA, and specifically the subsection 334 Defense Authorization Act of 1997 requirements regarding transfer of contaminated parcels will be significant issues requiring Agency oversight. Details of the excessing status can be found on the General Services Administration website at the URL.

SITE REPOSITORY

Johnson County Public Library
Desoto Branch
33145 W. 83rd
Desoto, KS 66018

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-4038

REGIONAL CONTACTS

SITE MANAGER: Ken Herstowski
E-MAIL ADDRESS: herstowski.ken@epa.gov
PHONE NUMBER: (913) 551-7631

COMMUNITY INVOLVEMENT COORDINATOR:
PHONE NUMBER:

PUBLIC INFORMATION CENTER:
E-MAIL ADDRESS:

STATE CONTACT: Randy Carlson
PHONE NUMBER: (785) 296-1682

MISCELLANEOUS INFORMATION

STATE: KS
Z4
CONGRESSIONAL DISTRICT: 03
EPA ORGANIZATION: SFD-SUPR/FFSE

MODIFICATIONS