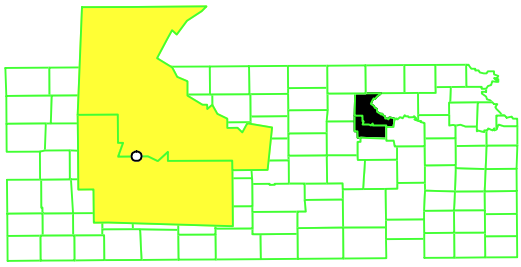
FORT RILEY

KANSAS
EPA ID# KS6214020756

EPA Region 7
City: Near Junction City
County: Geary County and Riley County
Other Names:

04/01/2010



SITE DESCRIPTION

Fort Riley is located in the Flint Hills region of Kansas along Interstate-70, approximately 125 miles west of Kansas City. It occupies approximately 100,656 acres of land in portions of Clay, Geary, and Riley Counties in northeast Kansas. Approximately 70,926 acres are used for maneuver training. Interstate 70, Junction City (population approximately 20,000), and Odgen (population approximately 1,600) bound the Installation to the south. Fort Riley is located west of Manhatten (population approximately 38,000). Milford Lake (approximately 16,020 acres in size) bounds a portion of the western side of the Installation.

Fort Riley was established in 1853 and has been owned and operated by the U. S. Army since that time. The Post is named in honor of Major General Bennett Riley, a distinguished veteran of the Mexican War and Commander of the first military escort along the Santa Fe Trail. Fort Riley was designated a Cavalry Headquarters in 1885 and is known as the "Cradle of the Cavalry." Fort Riley has trained and deployed military forces in virtually every major war of our nation's history. It is an integral part of American military history and is known as "America's War-fighting Center."

Numerous environmental investigations and sampling events were performed at Fort Riley in the 1970s and 1980s. These investigations identified activities and facilities where hazardous substances had been released or had the potential to be released to the environment. Potential sources of contamination include a variety of landfills; printing, dry cleaning, and furniture shops; and pesticide storage facilities. Fort Riley was placed on the National Priorities List (NPL) on 30 August 1990. The Department of Army and Fort Riley entered into a Federal Facility Agreement (FFA) with the Kansas Department of Health and the Environment (KDHE) and EPA Region VII in February 1991. The FFA, which incorporates both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Resource Conservation and Recovery Act (RCRA) actions, became effective in June 1991.

An Installation-wide Site Assessment was performed in 1993 to identify potential areas of environmental concern. As a result, five operable units (OU) were established and a group of minor areas of concern identified. The five OUs are:

OUl Southwestern Funston Landfill
OU2 Pesticides Storage Facility
OU3 Dry Cleaning Facility Area
OU4 Marshall Army Airfield -Former Fire Training Area
OU5 Building 354 area Groundwater Solvent Detection Site

The multiple sites of concern consists of 49 sites, and grouped into the following five groups:
1. Pesticide/PCB Sites
2. Wastewater Sites
3. Petroleum/VOC Sites
4. Former Landfill/Incinerator Sites
5. Former POL Sites

In addition to:
1. Camp Forsyth Former Landfill Areas
2. Building 319
3. Former Direct Support/General Support Maintenance Area
4. Current and Former Defense Reutilization and Marketing Office
5. Golf Course Pesticide Facilities

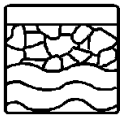
Site Responsibility:

This site is being addressed through Federal actions.

NPL LISTING HISTORY

Proposed Date:	07/14/89
Final Date:	08/30/90
Deleted Date:	

THREATS AND CONTAMINANTS



Monitoring wells in proximity to the former Camp Funston Landfill are contaminated with vinyl chloride and other VOCs. PCE has been detected in groundwater at the dry cleaning facility sites. The dry cleaning facilities are located downgradient of the Fort Riley well field. Groundwater near the installation boundary at the Marshall Army Airfield has been contaminated with

VOCs due to the operations of a former fire training pit. Landfill debris are reported to contain waste oils and degreasing solvents. The landfill is located within the flood plain of the Kansas River, which is used for recreational activities. Groundwater around the former Building 354 area has been contaminated with solvents. Touching or ingesting contaminated groundwater or soil could pose a health risk.

CLEANUP APPROACH

Response Action Status

OU1 Southwest Funston Landfill: The Southwest Funston Landfill is approximately 120 acres in size, located adjacent to the Kansas River and Camp Funston cantonment area. The landfill operated through a State of Kansas permit from mid 1950s until its approved closure in 1981. The landfill handled domestic refuse generated as a result of activities at the installation. Hazardous material, substances and wastes were also reportedly disposed in the landfill.

Post-closure monitoring and sampling completed during the remedial investigation/feasibility study (RI/FS) indicated chlorinated solvents, petroleum hydrocarbons, and metals in the groundwater at low levels. A Removal Action was completed to stabilize the Kansas River bank and to reduce infiltration through an evapo-transpiration cover. The Record of Decision (ROD) for this OU was signed on 6 August 1997. Institutional controls and long-term groundwater monitoring have been implemented. This site is subject to 5-year reviews in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Remedial Action Completion Report (RACR) was signed by EPA February 18, 2010.

OU2 Former Pesticides Storage Facility: The former Pesticides Storage Facility (PSF) is located in and around Building 348 in the Main Post cantonment area. Pesticides and herbicides were released to the environment through past operational and disposal practices. Building 348 was constructed in 1941 as a general purposed warehouse and was used for pesticide storage until at least 1973. Prior to the late 1970s, the maintenance yard area east of and adjacent to Building 348 was used to wash down vehicles and spray equipment used for pesticide applications. Pesticide and arsenic contamination in soils were the contaminants of primary concern. A Removal Action to excavate and dispose contaminated soils took place in 1994. The RI/FS was completed in July 1996 and the ROD for No Further Action was signed on 29 September 1997. This site is subject to 5-year reviews in accordance with the NCP. An ESD draft was submitted on February 4, 2010 to remove the ICs and to allow for unlimited use/unrestricted exposure based on the current conditions. EPA submitted its comments March 8, 2010 and awaiting the Fort response.

OU3 Dry Cleaning Facility: The dry cleaning facility at former Buildings 180/181 operated as a laundry from 1915 to 1983, and as a dry cleaning facility from 1930 to 1983. From 1983 onward until demolition in the summer of 2000, the buildings were used for general storage. During dry cleaning operations, Stoddard solvent, a petroleum distillate mixture, was used as the cleaning solution from 1944 until 1966. From 1966 until dry cleaning operations ceased,

tetrachloroethylene (PCE) was used as the cleaning solution. Buildings 180/181 and 182 and the surrounding parking lots and sidewalks were demolished in the summer of 2000. Buildings 183 and 184, and most of the surrounding structures were demolished in the fall of 2002.

The contaminants of concern at this site are PCE and its breakdown products - TCE, DCE and vinyl chloride. Contaminated groundwater is the media of concern. Contaminants were released to the environment by accidental spills of PCE which may have reached DCF building floor drains, and by direct discharge of dry cleaning wastewater to floor drains located inside the DCF buildings. Contaminants were transported to associated sanitary sewer lines where leaky sewers release PCE-laden wastewater to the environment. Prior to 1966, Stoddard solvents were released to the environment when still bottoms were dumped on the west side of Building 180/181.

Three remedial investigations have been performed at this site and a feasibility study addendum was completed in December 2004. A pilot study work plan was approved by the EPA and the KDHE in July 2005. The Pilot Study is designed to address three areas of concern (AOCs) and the utility corridor in the DCF Study Area by: (1) excavating soil from AOC-1 and the utility corridor for landfarm treatment at Camp Funston; (2) application of chemical oxidant (chemox) within the contaminated portions of the sanitary sewer lines and utility corridor; (3) enhanced anaerobic bioremediation (EAB) treatment of groundwater in AOC-2; and, (4) chemox and EAB treatment of groundwater in AOC-3. The Pilot Study work was executed in 2006. Another FS Addendum was prepared to include monitored natural attenuation (MNA) as a stand-alone remedy and submitted for approval in October of 2006. At a meeting with the Army and the KDHE on December 14, 2006, it was decided to scrap the 2006 FS Addendum and go forward with a Proposed Plan selecting MNA as the preferred remedy for this site. The draft final proposed plan was approved by EPA on October 11, 2007. The ROD was approved and signed on February 21, 2008. The draft RD/RA was approved on June 26, 2008.

OU4 Marshall Army Airfield Former Fire Training Area (FFTA): Extensive site characterization has been performed at the Former Fire Training Area at Marshall Army Air Field (FFTA-MAAF). A removal action was performed in 1994-1995 to address soil contamination. Groundwater investigations were conducted in 1997-1998 to characterize the off-post groundwater plume. Private wells in this area are being monitored by the Army, and an alternate water supply project for two adjacent private properties was completed in October 2002 by installation of a domestic water well outside the impacted zone. The RI was completed in 2001 and the FS was completed in 2004. The proposed plan, approved in 2005, identified Monitored Natural Attenuation with institutional controls as the preferred remedial alternative. The ROD was signed on 10 August 2005. This site is subject to 5-year reviews in accordance with the NCP.

OU5 Building 354 Solvent Detections Area: A variety of activities have been conducted at the 354 Area which have resulted in sources of both chlorinated solvent and hydrocarbon contamination. These activities include the operation of facilities for the storage and maintenance of motorized equipment, facilities for storing and dispensing fuel and oil for vehicles, and at least one area where fire fighting equipment may have been serviced or used for training. The former Building 354 was constructed in 1935 as a gas station and, in addition to

gasoline and diesel fuel, it may have been used as a storage site for solvents and road oil. Five underground storage tanks were removed from this area in 1990 and 1991. Building 367 was constructed in 1903 and has been used for a variety of purposes, including vehicle maintenance.

A removal action was performed at the Building 367 location during 2004 that successfully treated and removed approximately 1000 cubic yards of chlorinated solvent contaminated soil, effectively eliminating the source of groundwater contamination. PCE, trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and benzene are the contaminants of concern at this site and groundwater is the media of concern.

The Proposed Plan, approved in 2005, identified Monitored Natural Attenuation with institutional controls as the preferred remedial alternative. The ROD was signed on 3 July 2006. This site is subject to 5-year reviews in accordance with the NCP. A draft RACR was submitted March 15, 2010 and is still under review.

Multiple Sites of Concern: The Multiple Sites of Concern are sites that the Army believes have met the standards for closure in the past, but do not have the proper regulatory closure documentation to be considered No Further Action (NFA) sites at this time. In March 2005, the Army put forth a formal proposal to use an Expanded Site Investigation (ESI) format to perform record searches, site inspections, and sampling and analysis, as appropriate, to complete the necessary characterization and/or confirmation of closure for these sites which consist of 49 sites. A work plan was generated for regulatory approval and executed during FY06/FY07. A No Further Remedial Action Planned (NFRAP) letter will be generated for regulatory approval and close-out of those sites were investigatory results indicates the sites fall below actionable levels. Those sites exceeding regulatory standards after completion of the proposed investigation will be handled through normal CERCLA/Installation Restoration Program channels. These sites have been organized into five groups based on similar site charachteristics or contaminants. Investigations were completed in 2006 and the reports submitted in March 2007, and draft final reports were submitted on October 12 and 22, 2007. 44 sites were approved for close out and 5 were recommended for additional investigation. A work plan for these sites was submitted on April 4, 2008 and approved on April 21, 2008. Approval for all sites completed January 7, 2009.

Military Munitions Response Program for (MMRP) for Sherman Heights Small Arms Range Impact Slope, and Camp Forsyth Landfill Area 2 have been investigated and Draft RI/FS Work Plan was submitted July 2008. Comments were made and responded to and a Final Draft was submitted on January 2009. This Document is currently under review.

Site Facts: Fort Riley 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

The EPA and the Army have agreed to utilize the Superfund Accelerated Cleanup Model (SACM) approach, to the extent practical, to address short-term cleanup objectives at the Fort Riley site. Several interim response actions have been implemented based on this strategy, with the opportunity for additional actions to be completed in the near future. These interim actions have reduced the potential for contamination at the Fort Riley site while investigations are underway. The first five-year review was completed in July 2002, and the seconed five-year review draft report was submitted in April 2007 and approved on September 20, 2007.

COMMUNITY INVOLVEMENT

EPA ensures community members know about and participate in site issues and activities. Region 7 has assigned an EPA Community Involvement Coordinator to the site to answer community member/elected official/media questions and concerns; made the community aware of the Superfund Technical Assistance Grant; conducted community interviews; implemented a community involvement plan; briefed community members, elected officials and the media on site activities; held public meetings and/or public availability sessions; developed/mailed site specific fact sheets; published display ads in local newspapers; and in some cases facilitated the community in forming community advisory groups. The community involvement activities have been on-going since the site was proposed to the NPL.

SITE REPOSITORY

Manhattan Public Library, Juliette and Poyntz, Manhattan, KS 66502

Superfund Records Center
901 N. 5th St.
Kansas City, KS 66101
Mail Stop SUPR
(913)551-7166

REGIONAL CONTACTS

SITE MANAGER:	Amer N. Safadi
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COMMUNITY INVOLVEMENT COORDINATOR:	Dianna Whitaker
PHONE NUMBER:	whitaker.dianna@epa.gov
E-MAIL ADDRESS:	1-800-223-0425 or 913-551-7598
STATE CONTACT:	Travis Daneke
PHONE NUMBER:	(785) 296-6378

MISCELLANEOUS INFORMATION

STATE:	KS
	07CQ
CONGRESSIONAL DISTRICT:	02
EPA ORGANIZATION:	SFD-SUPR/FFSE

MODIFICATIONS