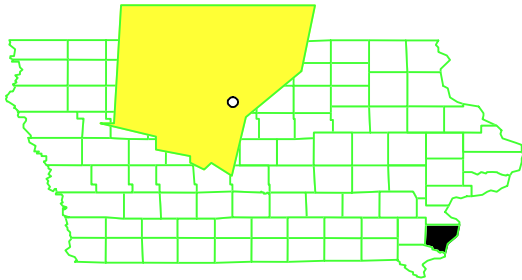


**IOWA ARMY
AMMUNITION PLANT
IOWA
EPA ID# IA7213820445**

**EPA Region 7
City: Middletown
County: Des Moines County
10 miles west of Burlington
Other Names:**

03/04/2009



SITE DESCRIPTION

The Iowa Army Ammunition Plant (IAAP) is a 19,127 acre site that was listed on the Superfund NPL in 1990. The IAAP is an active manufacturing facility. The primary activity at the IAAP since 1941 has been to load, assemble, and pack a variety of conventional ammunition and fusing systems for the Department of Defense. The Atomic Energy Commission (AEC) operated at Line 1 of the IAAP from 1948 to 1975 assembling nuclear weapons. Because of past AEC activity at the site, portions of the IAAP have been designated for inclusion in the Army Corps of Engineers Formerly Utilized Sites Remedial Action Program (FUSRAP). The FUSRAP was created to evaluate and remediate environmental impacts associated with past AEC operations. Wastes produced at IAAP consist of various explosive-laden sludges, wastewaters, and solids, lead-contaminated sludges, ashes from incineration and open burning of explosives, and waste solvents from industrial and laboratory operations. Past operations also generated waste pesticides and incendiaries. Radioactive wastes may have been generated by AEC weapons assembly operations. The Army has identified a number of potentially contaminated areas at the IAAP, including 2 abandoned explosive-wastewater settling lagoons, the Line 800 Pinkwater Lagoon and the former Line 1 Impoundment. These lagoons were used to settle out explosives-contaminated wastewaters prior to discharge into Brush Creek until approximately 1957. Approximately 80,000 cubic yards of contaminated sediments were held in the lagoons, which have since been remediated. Approximately 100 people live within 3 miles of the site. Some obtain drinking water from private wells. In the spring of 1993, the Army analyzed water samples from the wells of residences located just south of the IAAP. Two of the wells were found to contain explosives at levels exceeding health advisory limits. The Army offered alternate water supplies to all potentially impacted residents south of the IAAP and provided connections for all residents who so desired. Surface water within 3 miles downstream of the site is used for recreational activities.

Site Responsibility:

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This site is being addressed by the Army with oversight by the EPA and the Iowa Department of Natural Resources. The Iowa Department of Public Health provides oversight of matters associated with possible radiological contamination.

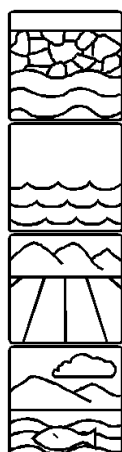
NPL LISTING HISTORY

Proposed Date: 07/14/89

Final Date: 08/30/90

Deleted Date:

THREATS AND CONTAMINANTS



The Army conducted tests from 1981 to 1984 and detected explosives from former waste disposal practices in surface water and in groundwater monitoring wells downgradient of the Line 800 Pinkwater Lagoon and the Line 1 Impoundment. In 1984, the Army detected explosives and lead in creek sediments. In 1993, the Army connected approximately 150 residences south of the IAAP to an alternate water supply due to actual and potential contamination of groundwater with explosives. Additional residents were provided an alternate water supply in the fall of 2001. Investigations to define the nature and extent of groundwater contamination off-post have been completed. The remedy to address this contamination was selected in August 2005 and is currently being implemented.

CLEANUP APPROACH

Response Action Status

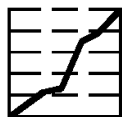
Interim Actions: In the summer of 1995, the Army completed interim cleanup actions to address soil contamination at a former pesticide disposal pit and at numerous explosive-wastewater sump locations. An additional interim action was initiated in the spring of 1996, in which approximately 83,000 cubic yards of explosives-contaminated soils and sediments from the former Line 1 Impoundment Area and the Line 800 Pinkwater Lagoon were excavated and disposed of on-site. Soils were segregated and disposed of according to their levels of risk. The most highly contaminated material has been temporarily stockpiled for treatment, which should begin in the spring of 2009. Mid-level waste materials have been permanently disposed on-site in a lined soil repository that has been built adjacent to the IAAP former Inert Disposal Landfill. The excavation of contaminated soils from the Line 1 and Line 800 areas was completed in the summer of 1997. The excavated areas at Lines 1 and 800 have been transformed into wetland areas. In the spring of 1998, the Army began implementation of a cleanup approach similar to

that used at Line 1 and 800 at over 200 other individual source areas. A Record of Decision (ROD) for this action was signed in March 1998. Based on this ROD, over 215,000 cubic yards of soils contaminated primarily with explosives and metals have been excavated from different areas of the IAAP during various phases of field work efforts. Most recently, approximately 17,000 cubic yards of contaminated soils were excavated and disposed at the Inert Disposal Landfill in late 2006 thru early 2007. This should complete the cleanup of soils under the Operable Unit 1 ROD. A portion of the excavated soils were treated on-site to address metals and explosives contamination in late-2001. As previously noted, approximately 15,000 cubic yards of contaminated soil remain stockpiled awaiting treatment, which should begin in the spring of 2009. A cleanup of solvent and fuel contaminated soils from past operation at the Fire Training Pit was completed in mid-1999.

Entire Site: In 1990, the Army began a study to determine the nature and extent of contamination at the site and identified 43 individual areas requiring investigation. With the assistance of the EPA, samples were collected from these potential areas of contamination. After analyzing these samples, the EPA and the Army determined that approximately three-quarters of the areas needed further investigation. A site-wide investigation was completed in 1994. The Army completed a supplemental field effort in the spring of 1997 to better define the extent of contamination. Significant volumes of contaminated soils from the former Line 1 Impoundment Area and the Line 800 Pinkwater Lagoon have been addressed through early response actions. Cleanup of additional soil contamination addressed by the 1998 ROD was completed by the Army in early 2007. Offsite groundwater sampling in the summer of 1999 indicated the presence of low levels of explosives in groundwater near Brush Creek, south of the IAAP. A remedy to address explosives groundwater contamination south of the IAAP was selected in mid-2005. The remedy includes enhanced biodegradation, monitored natural attenuation, and institutional controls, and is currently being implemented. Additional investigation of past AEC operations at the plant, especially at Line 1 and the Firing Site, are being addressed under FUSRAP. Chunks of depleted uranium were reported at the Firing Site in the fall of 2000, prompting increased focus on this area. Access to this area has been restricted and is the subject of additional investigation. FUSRAP began work in late-2008 to remove contaminated soils from Line 1 and the West Burn Pads Area South of the Road, based on the OU1 ROD. This contaminated soil is being disposed at the Inert Disposal Landfill. FUSRAP cleanup of Line 1 and the West Burn Pads should conclude in the spring of 2009.

Site Facts: The IAAP was proposed for the National Priorities List (NPL) in 1989. A Federal Facility Agreement (FFA) was negotiated between EPA and the Army in late 1990. The FFA defines roles and responsibilities for the Army's cleanup work at the site, and defines a process for inter-agency coordination. Funding to address environmental investigations and cleanups at the IAAP is provided through the Defense Environmental Restoration Program, a program established to identify, investigate, and control hazardous contaminants at DoD facilities. In 2006, the EPA, the state of Iowa, the Army Corps of Engineers, and the Department of Energy signed a second FFA for the IAAP which addresses FUSRAP investigatory and cleanup work at the site.

ENVIRONMENTAL PROGRESS



The various interim actions completed at the IAAP site, including the removal of sources of explosives and metals in soils, and the installation of alternate water supplies for potentially impacted residents, has reduced the potential threats to people and the environment while further cleanup actions are being planned and implemented.

COMMUNITY INVOLVEMENT

A Restoration Advisory Board (RAB) has been formed by the Army and operating at the site for several years. The RAB provides an opportunity for community involvement in cleanup activities at the site. The RAB meets on a quarterly basis and is generally well attended. Interested persons should contact the IAAP or the EPA if they would like to participate on the RAB.

SITE REPOSITORY



Main Administration Building, Iowa Superfund Records Center
Army Ammunition Plant, Middletown, 901 N. 5th St.
IA 52638 Kansas City, KS 66101
Danville Iowa City Hall, Danville, IA Mail Stop SUPR
Burlington Public Library, Burlington, (913)551-7166
IA

REGIONAL CONTACTS

SITE MANAGER:	Scott Marquess
E-MAIL ADDRESS:	marquess.scott@epa.gov
PHONE NUMBER:	(913) 551-7131
COMMUNITY INVOLVEMENT COORDINATOR:	Debbie Kring
PHONE NUMBER:	(913) 551-7725
E-MAIL ADDRESS:	kring.debbie@epa.gov
STATE CONTACT:	Dan McGhee, Iowa Department of Public Health / Dan Cook Iowa Department of Natural Resources
PHONE NUMBER:	(515) 281-0411 / (515) 281-4171

MISCELLANEOUS INFORMATION

STATE:	IA
CONGRESSIONAL DISTRICT:	02
EPA ORGANIZATION:	SFD-SUPR/FFSE

MODIFICATIONS

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