HOW DOES FUSRAP WORK?

FUSRAP sites undergo several steps that lead to cleanup. During a preliminary assessment, information about the site is collected and reviewed. If it appears there may be contamination on site, an investigation with testing is performed to determine whether contamination is present on site. The next step is a remedial investigation/ feasibility study. The purpose of the remedial investigation/feasibility study is to identify the contamination at the site and its exact location. The feasibility study develops and evaluates cleanup alternatives. Throughout the remedial investigation/ feasibility study process, the public is informed about the progress toward a decision concerning cleanup alternatives and is encouraged to make comments.

When a cleanup alternative/option/action is chosen, a proposed plan is written that explains the rationale and details of the selected alternative. Members of the public are asked to comment on all of the cleanup options, including the selected alternative. After public comments are considered, a final decision is made and documented in a record of decision. The remedial design follows the record of decision and includes preparation of technical drawings and specifications that direct how the cleanup will be conducted. Cleanup begins after the remedial design is complete. This phase involves site preparation and construction activities. When these activities are completed, testing is conducted to ensure that cleanup objectives for the site have been met.

HOW IS FUSRAP ORGANIZED?

Administrative, and financial management of FUSRAP activities are the responsibility of the USACE Headquarters in Washington, DC who delegates the work to the divisions. The Buffalo District is within the Great Lakes & Ohio River Division. Project management of the Buffalo District FUSRAP sites is done with a team approach with all team members reporting to the project manager for each site. The team members include experts from many different districts. Most site investigations and cleanups are done by contractors under the supervision of Corps. The Corps ensures that all FUSRAP activities comply with CERCLA requirements.

HOW CAN I GET MORE INFORMATION?

The Buffalo District Team wants to keep you informed and involved in the decision making process for its FUSRAP sites. We have developed fact sheets for each of our sites that are available for your use. We will also hold Information Sessions for our sites as new information becomes available.

Each site has an Administrative Record File which contains reports USACE has developed and references they have used. These documents support the decisions that are made for the site. The Administrative Record Files are maintained in a library near the site and at the USACE Buffalo District compound.

Telephone:

Please call the FUSRAP toll-free public access line with any questions.
Toll-free telephone number: 1-800-833-6390

Internet:

Information on FUSRAP is also available on the intern
The Buffalo District home page address is:
http://www.lrb.usace.army.mil

Mail:

Additional information can be obtained by contacting:
U.S. Army Corps of Engineers
FUSRAP Public Information Center
1776 Niagara Street
Buffalo, New York 14207-3199

US Army Corps of Engineers®

FUSRAP

BUFFALO DISTRICT

Fact Sheet

January 2001

Formerly Utilized Sites Remedial Action Program

WHAT IS FUSRAP?

The Formerly Utilized Sites Remedial Action Program (FUSRAP) was initiated in 1974 to identify, investigate, and clean up or control sites throughout the United States that were part of the Nation's early atomic energy program during the 1940s, 1950s, and 1960s. Activities at the sites were performed by the Manhattan Engineer District (MED) or under the Atomic Energy Commission (AEC). Both MED and AEC were predecessors of the Department of Energy (DOE). In October 1997, management of FUSRAP was transferred to the U.S. Army Corps of Engineers.

When a site is identified, records are reviewed by DOE. The Corps then does a Preliminary Assessment/Site Investigation to determine if contaminant's are present and further investigation is necessary. If contamination is ound that is connected with MED or AEC activities, ceeding guidelines, cleanup is authorized under FUSRAP. Congress has also added other sites to FUSRAP. The Buffalo District has been assigned eight FUSRAP sites within its district boundaries in New York and Ohio.

Generally, sites that became contaminated during the early atomic energy program were cleaned up and released for use under the cleanup guidelines in effect at that time. The cleanup guidelines used were not as strict as today's revised standards; as a result, trace amounts of low level residual radioactive materials remain at some of the sites. In addition, with the demolition of buildings and movement of materials, over several years contamination may have spread to other locations, or eroded onto vicinity properties near some of the sites.

HOW HAZARDOUS ARE FUSRAP SITES?

Even though FUSRAP sites contain levels of radioactive contamination above current guidelines, none of these sites pose an immediate health risk to the public or environment under current land uses. The contaminated materials have very low concentrations, and people are not exposed to them for long periods of time. Although se materials are not an immediate hazard, they will main radioactive for thousands of years, and health risks could increase if the land use were to change. Under FUSRAP, each site is cleaned to a standard that considers possible future uses for the land.

WHAT ARE FUSRAP'S OBJECTIVES?

The objectives of FUSRAP are to:

- Evaluate sites that supported MED/AEC nuclear work and determine whether the sites need cleanup and/or control.
- Cleanup or apply controls to these sites so that they meet current guidelines.
- Dispose of or stabilize contamination in a radiologically and environmentally acceptable manner.
- Complete all work in a manner consistent with appropriate Federal laws and regulations and state and local environmental land use requirements (to the extent permitted by Federal law).

LAWS THAT GOVERN FUSRAP

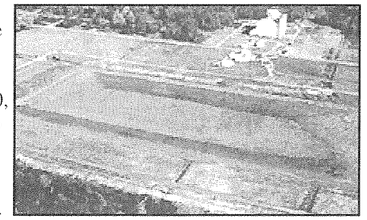
Every step of the FUSRAP cleanup process is regulated by a number of Federal and State laws and their implementing regulations. Chief among these is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

CERCLA provides the framework for a systematic investigation, remedial design, and cleanup of contaminated sites. CERCLA requires that the public be informed and involved in the decision making process.

It is typical for many FUSRAP sites to be subject to multiple laws, depending upon the type and extent of contamination at the site. Other laws may include the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, the Atomic Energy Act, the Uranium Mill Tailings Radiation Control Act, and state and local laws.

Niagara Falls Storage Site
Lewiston, New York

The Niagara Falls Storage Site (NFSS) is located in the Township of Lewiston (Niagara County), in northwestern New York about 10 miles north of the City of Niagara Falls, New York. This 191-acre site contains a multi-story former process building with three attached silos, a single story storage building, a small storage shed, and an engineered Waste Containment Structure (WCS). The WCS contains 250,000 cubic yards of radiological material, 4,000 cubic yards of which are high activity wastes containing over 500,000 pCi/gram of activity. Constituents of concern are thorium-230, radium-226 and radon-22, in addition to smaller amounts of uranium-235 and uranium-238. This storage facility was originally part of the former Lake Ontario Ordnance Works, a site used for producing explosives during WWII. During the war the Niagara Falls Storage Site was used by the Manhattan Engineer District for storing radioactive residues and wastes from uranium ore processing conducted during the development of the atomic bomb.



The Corps has erected a security fence around the engineered cell, has decontaminated and removed a former office building, and has conducted periodic radiological and chemical sampling of groundwater at the site. In addition, the Corps monitors radon emissions at the site boundaries and measures radon flux from the WCS. The Corps began a remedial investigation/feasibility study of the 191-acre site in 1999. The first two phases of the remedial investigation field work have been completed and the third phase is in the planning stage. A detailed geophysical study and gamma walkover (radiological survey) of the property will begin in Spring 2001 and will be used to determine the safe longevity of the WCS.

Linde Site
Tonawanda, New York

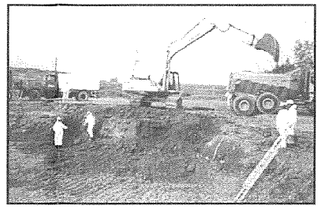
The Linde FUSRAP site is located in the Town of Tonawanda, a suburb north of Buffalo, New York. The project consists of two distinct areas:

The former Linde Air Products Division of Union Carbide operated on a site about 105 acres in size. Linde was contracted by the Manhattan Engineering District to process uranium ores between 1942 and 1946. These activities resulted in radioactive contamination of portions of the property. Praxair, Inc. now occupies the site and employs 1,400 people in its research and development facility. A public elementary school and numerous residential properties adjoin the property. Several interim removal actions consisting of structural decontamination, building demolitions and disposal actions have been completed. The Corps is scheduled to complete a soils remedial action in 2002. The Corps also has separate actions underway to address Groundwater and Building 14.

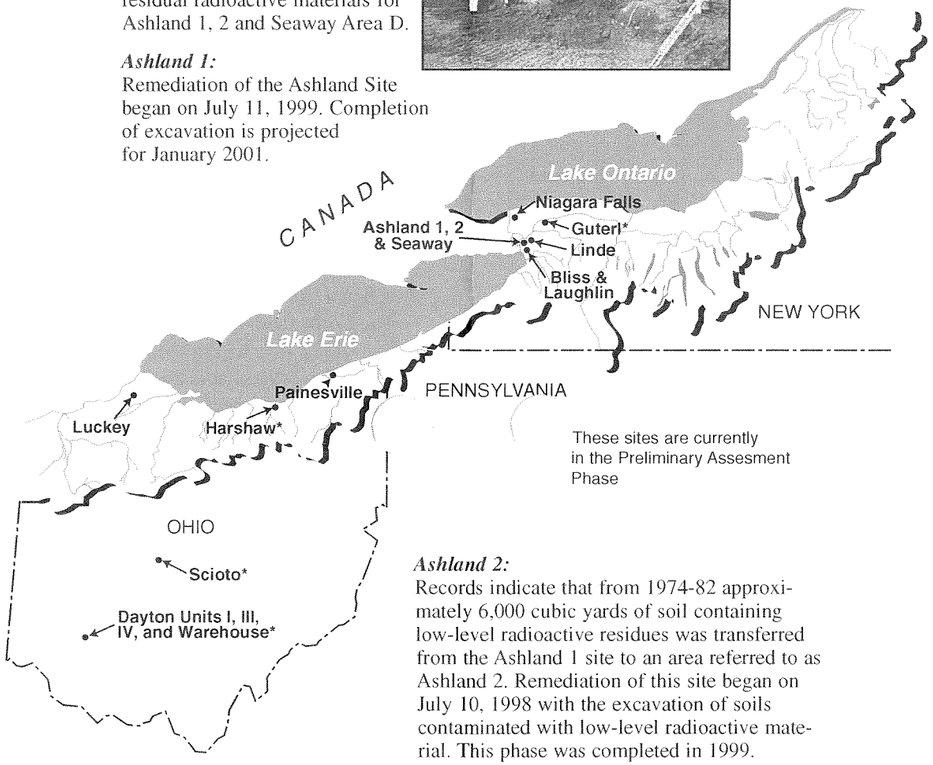
A designated vicinity property at the Tonawanda Landfill and Mudflats Area, is located about 1.5 miles north of the Linde site property. It consists of two Town of Tonawanda municipal parcels -- the Landfill being approximately 55 acres and the Mudflats approximately 115 acres. Radioactive material in these sites has been identified, and as a result, they were formally designated a Linde Vicinity Property in 1992. The Corps is scheduled to complete a Remedial Investigation/Feasibility Study in 2002.

Ashland 1, Ashland 2 & Seaway
Tonawanda, New York

Ashland 1, Ashland 2, and Seaway are located along the Niagara River on River Road in Tonawanda, New Yor[illegible] ween 1944- [illegible]idues consisting primarily of low grade uranium ore tailings [illegible] leposited a[illegible]nd 1. Records indicate that approximately 8,000 tons of re[illegible]ues were spread over roughly 2/3 of the property. In 1960, after environmental testing indicated the site met cleanup guidelines in effect at that time, the property was transferred to the Ashland Oil Company. A Record of Decision was issued in April 1998 detailing the remediation plans to remove trace amounts of low level residual radioactive materials for Ashland 1, 2 and Seaway Area D.



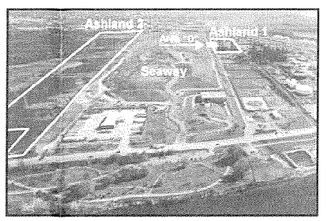
Ashland 1:
Remediation of the Ashland Site began on July 11, 1999. Completion of excavation is projected for January 2001.



These sites are currently in the Preliminary Assesment Phase

Ashland 2:
Records indicate that from 1974-82 approximately 6,000 cubic yards of soil containing low-level radioactive residues was transferred from the Ashland 1 site to an area referred to as Ashland 2. Remediation of this site began on July 10, 1998 with the excavation of soils contaminated with low-level radioactive material. This phase was completed in 1999.

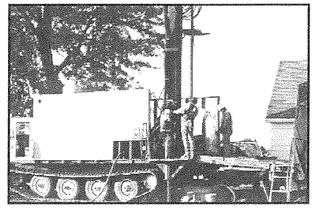
Seaway:
Known as Seaway Industrial Park, became contaminated during the transfer of contaminated soil from Ashland 1 and 2 from 1974-82 .



The site is owned by Sands Mobile Park, Inc. Area D was included in the Record of Decision issued in April, 1998. The Corps is currently conducting a feasibility study that will provide additional information on the site and wi[illegible] determin[illegible] appropriate remedial action.

Luckey Site
Luckey, Ohio

The Luckey Site covers approximately 40 acres and is located 22 miles southeast of Toledo, Ohio at 21200 Luckey Road, Luckey, Ohio. The facility processed magnesium during WWII. In 1949 a beryllium production facility was built on the site. The waste solutions and sludge from the beryllium operation were stored on the plant property in three lagoons ranging in depth from 1.5 feet to 6 feet. In 1958, beryllium production ceased, although beryllium powder blending and sintering operations reportedly continued into the early 1960's. On a yearly basis throughout the 1950's, sludge material from the lagoons was moved to the northeast corner of the property where the material was buried. The remedial investigation conducted by the Corps reveals the northeast corner of the site and several smaller areas at the site still contain beryllium contamination and a lesser amount of radioactive contamination. The Corps issued a remedial investigation report in September 2000 and is currently preparing the feasibility study, which is scheduled to be done at the by the end of 2001.



Painesville Site
Painesville, Ohio

The Painesville Site is approximately 50 acres with large buildings and rail lines. It is located at 720 Fairport-Nursery Road in Painesville, Ohio, approximately 22 miles northeast of Cleveland, Ohio. In the 1940's, the Defense Plant Corporation constructed a magnesium production facility on property owned by the Diamond Magnesium Company. Diamond Magnesium received about 1650 tons of radioactive scrap steel - mostly empty drums - which was used to control chlorine emissions in the production of magnesium. The contamination is restricted to outside soils which contain residual uranium, radium, and thorium. Surveys conducted indoors found no evidence of radioactive contamination.

A removal action was conducted in 1998. The Corps is currently performing a focused remedial investigation/feasibility study for the site.

Former Bliss & Laughlin
Buffalo, New York

★Completed by Buffalo District in 1999★