The
DuPont Chambers Works FUSRAP Site

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US Army Corps of Engineers
Philadelphia District

The DuPont Chambers Works site is a 700-acre active chemical plant in Pennsville and Carneys Point Townships, Salem County, New Jersey. It is located on the southeastern shore of the Delaware River, north of the I-295 Delaware Memorial Bridge and adjacent to the residential community of Deepwater, New Jersey (Fig. 1).

Fig. 1

Dupont Chambers Works Facility

Site History

The plant first opened in the early 1900's as a dye manufacturing plant. From 1942 to 1947, DuPont conducted research using uranium for the Manhattan Engineer District (MED). This research contributed to the development of the atomic bomb. All MED activities were transferred to the Atomic Energy Commission (AEC) in 1946. DuPont continued its research for the AEC until late 1947. In 1948 and 1949, the AEC conducted initial radiological surveys, decontamination of building surfaces and cleanup activities at the site using criteria of that time. AEC released the buildings back to DuPont in 1949.

In 1974, DOE created the Formerly Used Sites Remedial Action Program (FUSRAP) to address potential radiological contamination from AEC and MED activities. A radiological survey of the DuPont facility, conducted by DOE in 1977, indicated that low levels of uranium were present in some soils and in one building. This prompted DOE to designate the DuPont Chambers Works facility as a FUSRAP site for further investigation.

In 1983, DOE conducted another survey to define the locations and boundaries of the contamination. The areas investigated were those determined to be of interest through historical MED documents. Six separate areas were surveyed: (1) Building J-26 Area; (2) F Corral Parking Area; (3) Building 845 (structure and site); (4) Central Drainage Ditch; (5) East Burial Area; and (6) Lagoon A (Fig. 2).

What is "FUSRAP?"

The Department of Energy created the Formerly Used Sites Remedial Action Program (FUSRAP) to address potential radiological contamination remaining at sites used by DOE's predecessor agencies, the Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC) from the 1940's through the 1960's. FUSRAP was transferred from the DOE to the U.S. Army Corps of Engineers (the Corps) by the Energy and Water Development Appropriations Act for Fiscal Year 1998 (Public Law 105-62). When the program was transferred to the Corps, FUSRAP consisted of 46 sites in 14 states and remediation had been completed at 24 of the sites.

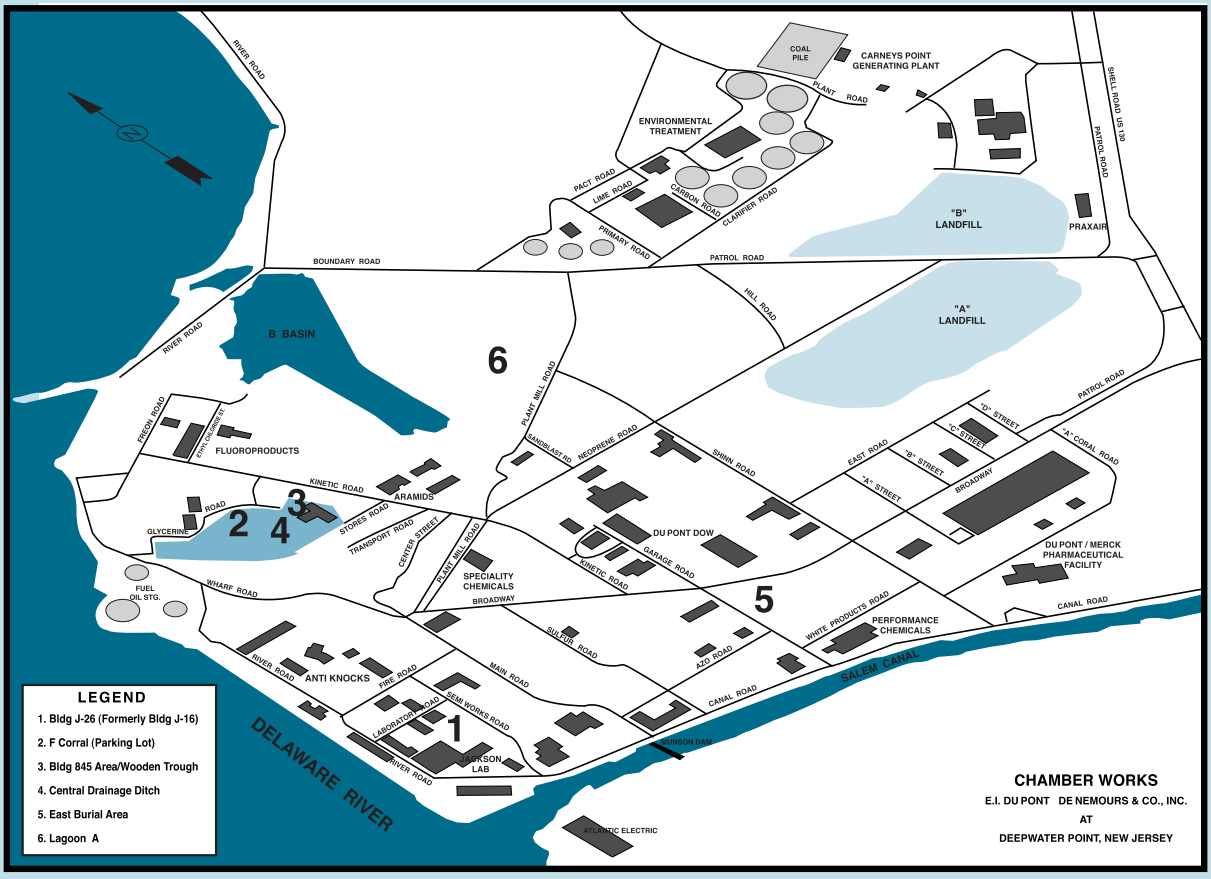


Fig. 2

In some areas, subsurface contamination may exist at depths greater than 3 meters. The major FUSRAP contaminant, both in soil and water samples, is uranium. The FUSRAP radiological contamination is at very low levels and does not present any immediate threat to human health or the environment.

(1) Building J-26 – This is the former site of a demolished building used in MED activities. DOE detected sufficiently low levels of uranium contamination in soils and determined that the site may be releasable for unrestricted use, however confirmatory investigations are required.

(2) F Corral – This 150-foot by 175-foot-area is a paved parking lot built over the former site of a demolished building used for MED activities. DOE detected low-level uranium contamination in soils. Confirmatory investigations are required.

(3) Building 845 (Miscellaneous Stores) – This was a four-story, 50,000-square foot steel frame building previously used for MED activities (Fig. 3a and

Building 845 before demolition

Building 845 after demolition

Fig. 3b). DOE performed interior surface decontamination of the building in 1996. In September 1998, the Corps removed and disposed of nine drums of mixed waste and approximately 40 bags of personal protection equipment used during

DOE's decontamination effort that remained stored on the first floor of the building. The Corps shipped the material to a licensed disposal facility in Texas. DuPont completed demolition of the building in February 1999 and stockpiled the structural steel on-site for disposal by the Corps (Fig. 3b). The Corps is honoring a commitment made by DOE to DuPont to dispose of the structural steel containing fixed radiological contamination. The Corps signed an Action Memorandum for disposal of the structural steel on June 4, 1999, and efforts to initiate disposal are underway.

(4) Central Drainage Ditch – DuPont performed chemical remediation of soils in the Central Drainage Ditch in the vicinity of Building 845 in the spring of 1997. An independent verification study performed for DOE confirmed that the chemical remediation that DuPont conducted removed radiological contamination in soils to sufficiently low-levels and that the site may be releasable for unrestricted use. However, confirmatory investigations of adjacent areas of the Central Drainage Ditch are required.

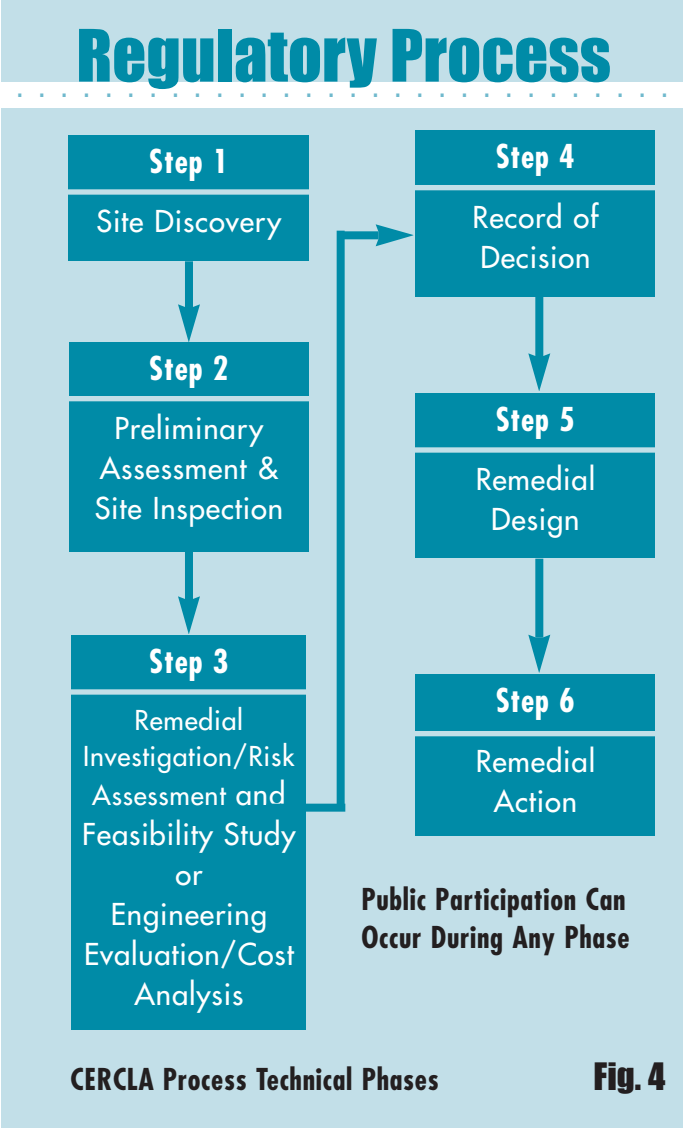
(5) East Burial Area – This former disposal area, measuring approximately 350 feet by 85 feet, is believed to contain the rubble from demolished buildings used in MED activities. DOE detected subsurface uranium contamination in soils. Other radiological contamination not related to FUSRAP may be present as well as mixed wastes from other activities. Confirmatory investigations are required.

(6) Lagoon A – This is the site of a former wastewater sludge lagoon. DOE detected sufficiently low levels of uranium contamination in soils and determined that the site may be releasable for unrestricted use, however confirmatory investigations are required.

Regulatory Process

All FUSRAP activities will be coordinated with the New Jersey Department of Environmental Protection (NJDEP) and EPA Region II. FUSRAP will be conducted under the general guidelines of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and follow the same set of administrative, procedural and regulatory requirements established by CERCLA. (Fig. 4).

Following the removal and disposal of the structural steel from Building 845, the Corps intends to complete a re-assessment of DOE's previous investigations. The Corps will proceed with a Remedial Investigation and Feasibility Study (RI/FS), which will lead up to the publication of a Record of Decision (ROD). The ROD will determine and identify any necessary cleanup activities.



Administrative Record
PUBLIC MEETING
community interviews
RAB
Restoration Advisory Board

Public Involvement

One of the key provisions of CERCLA is public involvement. An initial public meeting was held at the Salem Community College on June 9, 1999 to introduce FUSRAP to the community and solicit preliminary input.

The Corps conducted interviews with 26 representatives of the community to determine the best approach for public involvement. The information obtained from these interviews is being incorporated into a community relations plan that will identify key community concerns and the public involvement effort. The Corps has also conducted briefings for local elected officials including the Carney's Point Township Committee, the Pennsville Township Committee, the Borough of Penns Grove Council, and the Salem County Freeholders.

The Army Corps will use several means to keep community members informed of progress. An Administrative Record containing documents used in the decision-making process will be available for public review in September 1999 at the Salem Community College Library.

Other means include newspaper articles, newsletters, public meetings, and possibly a Restoration Advisory Board (RAB). The RAB is a communications forum enabling the public to provide input on cleanup decisions. The RAB would be comprised of a diverse array of stakeholders, including representatives from the Corps, EPA, the NJDEP, DuPont, local government, and citizens who reflect the diverse interests of the local community. The Corps will solicit interest in a RAB in September 1999 through a public notice in the *Today's Sunbeam* newspaper and a mailing to local residents. If sufficient interest exists, the first RAB meeting will occur in late October. All RAB meetings will be open to the public. For more information about the RAB, contact Ms. Sandra Chaloux, CEC, at (800) 232-7074. For more information about FUSRAP, contact Mr. George Bock, US Army Corps of Engineers, at (215) 656-6513.

For More Information

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