Fact Sheet





This fact sheet provides information about the **Wayne site**. Long-term stewardship responsibilities for this site are managed by the **U.S. Department of Energy Office** of Legacy Management under the Formerly Utilized Sites Remedial Action Program.

Site Information and History 🗓 💵

The Wayne, New Jersey, Site (previously called the Wayne Interim Storage Site) is located at 868 Black Oak Ridge Road in Wayne Township in northern New Jersey. The site sits at the intersection of Black Oak Ridge Road and Pompton Plains Crossroad, approximately 20 miles north-northwest of Newark. The site is fenced and roughly rectangular in shape, covering approximately 6.5 acres.

In 1948, Rare Earths, Inc., began processing monazite sand to extract thorium and rare earth metals and, in doing so, buried contaminated waste materials on the site. W.R. Grace & Company acquired the facility in 1957, and processing continued until 1971, when the plant closed. Applied Health Physics, Inc., decontaminated the buildings in 1974, and the U.S. Nuclear Regulatory Commission released the property for unrestricted use in 1975.

An aerial radiological survey in 1981 identified elevated radiation levels at the site and west along Sheffield Brook. Subsequent walkover surveys conducted in 1982 confirmed that concentrations of surface radionuclide contamination were greater than acceptable U.S. Department of Energy (DOE) remedial action guidelines at the time.

The Wayne site was designated for remedial action under the DOE Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1984. That same year, DOE purchased the site to use for storage of contaminated material from a vicinity property, and the U.S. Environmental Protection Agency (EPA) added the site to the National Priorities List (NPL). Although thorium was the principal contaminant detected, radium, uranium, and nonradioactive metals were also identified at the site. Two types of contaminated media were present: source materials (soil, processing waste, and bulk waste) and building materials from an on-site structure. DOE conducted cleanup work on the site from 1985 to 1993. Additional cleanup at several off-site locations, called vicinity properties, was primarily conducted between 1985 and 1987 and completed in 1993.

Excavated materials from vicinity properties were placed in an interim storage pile on top of the site's process waste pits because a permanent waste disposal facility was not available at the time.

In 1997, the U.S. Army Corps of Engineers (USACE), removed an estimated 38,500 cubic yards of contaminated material from the interim storage site and disposed of it in a licensed, off-site facility. An additional 41,500 cubic yards of buried contaminated materials were removed and disposed of in 1998. Another 55,410 cubic yards of contaminated material and building debris was excavated and disposed of in 2000. The materials included those from the waste pit and affected soil and debris from beneath the footprint of the former pile. USACE began a long-term groundwater monitoring program in 2002 that continued through 2006.

Preparations for site closeout included a document review, which identified two vicinity properties in need of additional cleanup. Both had been remediated in the 1980s to criteria that were less stringent than those specified in the Record of Decision. The additional work was completed under an Explanation of Significant Difference to the Record of Decision.

The results from five years of groundwater monitoring indicated that site activities did not degrade groundwater quality, which meant the site met the criteria for unrestricted

use. EPA Region II completed an inspection in September 2003 and verified that remedial action was completed at the Wayne site and its vicinity properties.

In 2010, USACE characterized and removed contaminated soil in the Pompton Plains Crossroad and Black Oak Ridge Road rights of way, where culverts funneled Sheffield Brook beneath the roads.

Regulatory Setting

The U.S. Atomic Energy Commission (AEC), the predecessor agency to DOE, established FUSRAP in March 1974 to evaluate radioactive contamination at sites used in the development of the nation's nuclear weapons and atomic energy programs. DOE has the legislative authority under the Atomic Energy Act (AEA) of 1954, as amended, to perform radiological surveys, monitoring, and maintenance at sites used to support the nuclear activities of DOE's predecessor agencies. DOE also had legislative authority under the AEA to remediate FUSRAP sites identified as requiring some form of response action.

The Wayne site was initially remediated to interim soil criteria for Decontamination and Decommissioning Program sites. A notice of cleanup certification for the site was published in the Federal Register on October 29, 1984.

In 1997, Congress transferred responsibility for FUSRAP site characterization and remediation from DOE to USACE, and since 1997, response actions at FUSRAP sites have been conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan. The DOE Office of Legacy Management (LM) retains responsibility for long-term stewardship of remediated FUSRAP sites. For more information about the program, please see the FUSRAP fact sheet.

Additional remediation was performed under the 2000 Record of Decision for the Wayne Interim Storage Site and the 2003 Record of Decision Explanation of Significant Difference for the Wayne Interim Storage Site. USACE activities were conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act.

Remedial activity had achieved cleanup levels allowing for unrestricted use and unlimited exposure at the site. In 2007, USACE transferred long-term stewardship responsibility for the Wayne FUSRAP site to LM.

Current Site Conditions

Post-remedial action survey data indicate that the radiological condition of the Seymour site is in compliance with applicable DOE standards and guidelines for cleanup of residual radioactive contamination. Based on a review of the post-remedial action data, DOE certified that radiological conditions at the Seymour site comply with

decontamination criteria to protect health, safety, and the environment for continued use. An independent verification survey conducted after the completion of remedial action detected no residual radioactivity in remediated areas that exceeded current guidelines. Therefore, DOE released the site for unrestricted use.

Minor inaccessible, fixed residual radioactive material was left in three manholes and interconnecting drain pipes beneath the Rupert Building because decontamination would have compromised their structural integrity. This material is non-transferable and poses no unacceptable risk to human health and the environment and would not need to be disposed of as regulated waste should the property owner demolish or otherwise remove these inaccessible structures.

Legacy Management Activities 💫



No monitoring, maintenance, or site inspections are required for the Seymour site. LM's responsibilities consist of managing site records and responding to stakeholder inquiries.







CONTACT **INFORMATION**

IN CASE OF AN EMERGENCY AT THE SITE, **CONTACT 911.**

Site-specific documents related to the Wayne, New Jersey, Site are available on the LM website at www.energy.gov/lm/wayne-new-jersey-site

For more information on FUSRAP site history or current long-term stewardship activities, contact: **U.S.** Department of Energy Office of Legacy Management 2597 Legacy Way **Grand Junction, CO 81503**

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