



New Brunswick, New Jersey, Site

A FUSRAP site

This fact sheet provides information about the **New Brunswick 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 New Brunswick, New Jersey, Site (site of the former New Brunswick Laboratory) is located in an industrial area at 986 Jersey Avenue, approximately 1.6 miles from downtown New Brunswick. The 5.6-acre site is bordered by Jersey Avenue on the west, a main rail line and vacant property on the east, and industrial property on the north and south.

The U.S. government used the laboratory for nuclear reactor and weapons programs from 1948 to 1977. The site included a main laboratory building, a plutonium laboratory complex, and nine other support buildings. Thorium and uranium ores, plutonium, americium, and enriched uranium were all used at the laboratory. In 1960, soil containing pitchblende (an ore containing uranium) residue was shipped from the Middlesex Municipal Landfill to the New Brunswick site, where it was mixed with clean soil in order to fill an abandoned rail spur that entered the eastern side of the property. The facility was closed in 1977, and laboratory operations were relocated to Argonne National Laboratory. The 29 years of operations at the site resulted in radiological contamination of the property.

The U.S. Department of Energy (DOE) remediated most of the site in two phases. Phase I, completed in 1978, included removing plumbing and equipment and portions of floors, walls, and ceilings. Phase II, conducted from 1981 through 1983, removed all aboveground structures, including contaminated concrete foundations, drain lines, and soil. Phase II waste and debris were shipped to the Nevada

Test Site for disposal, and 13 groundwater monitoring wells were installed.

After the two remediation phases were completed, verification surveys and sampling showed that the filled railroad spur and a spot midway along the southern fence line were contaminated with uranium, radium, and thorium. The additional remediation was assigned to the Formerly Utilized Sites Remedial Action Program (FUSRAP) and was completed in 1996.

Contaminated soil was removed with heavy equipment, and soils were separated using a segmented gate system. The removed materials were shipped by rail to a licensed disposal facility.

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 has legislative authority under the AEA to remediate FUSRAP sites identified as requiring some form of response action. In 1997, Congress transferred responsibility for FUSRAP site characterization and remediation from DOE to the U.S. Army Corps of Engineers (USACE). The DOE Office of Legacy Management (LM) retains responsibility for long-term care of remediated FUSRAP sites. For more information about the program, please see the [FUSRAP fact sheet](#).

The New Brunswick site was remediated to criteria in DOE Order 5400.5, *Radiation Protection of the Public and the Environment*. A notice of cleanup certification for the site was published in the *Federal Register* on September 24, 2001.

In fiscal year 2004, DOE transferred long-term stewardship responsibilities for the New Brunswick FUSRAP site from the DOE Office of Environmental Management to LM.

Current Site Conditions

Post-remedial action survey data indicate that the radiological condition of the New Brunswick site complies with DOE standards and guidelines for cleanup of residual radioactive contamination.

An independent verification survey, conducted after remedial action was completed, detected no residual radioactivity that exceeded current guidelines. Based on these radiological conditions, DOE released the site for unrestricted use.

The New Jersey Department of Environmental Protection (NJDEP) later determined arsenic was present in the soil and requested additional groundwater sampling. USACE conducted groundwater and soil sampling, and the results demonstrated that groundwater quality met applicable standards. USACE removed the monitoring wells in 2006. DOE submitted a deed notice restricting excavation in the arsenic-contaminated soil. NJDEP agreed to the deed notice in 2011 and issued a decision that no further action was required. All future owners of the site are bound to the excavation restrictions.

NJDEP requested additional radiological data on drain lines entering a sanitary sewer in the public right of way at the property frontage. DOE completed a radiological survey in 2009 and found no indication that radioactivity exceeded background levels.

The property was transferred to a private owner in late 2009 and has been redeveloped into a 72,000-square-foot waste transfer facility.

Legacy Management Activities

The property owner will inspect the site and submit a remedial action protection certification to NJDEP every two years, as specified in the no-further-action decision. LM is responsible for managing site records and responding to stakeholder inquiries.



Construction of the new waste transfer station, New Brunswick, New Jersey, Site, June 2019.



CONTACT INFORMATION

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

**LM TOLL-FREE EMERGENCY HOTLINE:
(877) 695-5322**

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

For more information on FUSRAP site history or current long-term stewardship activities, contact:

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