



New Brunswick, New Jersey, Site

FACT SHEET

*This fact sheet provides information about the New Brunswick, New Jersey, Site.
This site is managed by the U.S. Department of Energy Office of Legacy Management.*

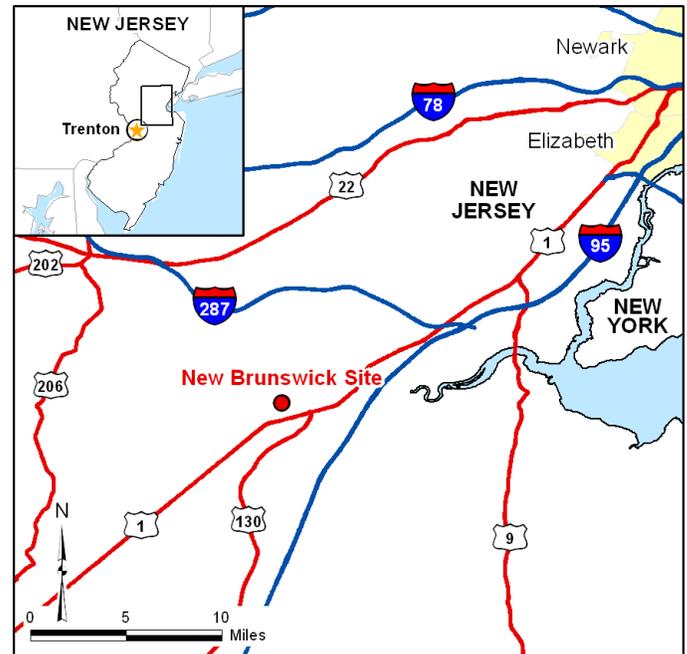
Site Description and History

The New Brunswick, New Jersey, Site (formerly the New Brunswick Laboratory Site) is located at 986 Jersey Avenue, approximately 1.6 miles from downtown New Brunswick, New Jersey. The 5.6-acre site is situated in an industrial area and consists of a vacant and fenced grass-covered lot. The property 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.

From 1948 to 1977, the site was used by the U.S. government as a chemistry laboratory for nuclear reactor and weapons programs. 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 site. In 1960, soil containing uranium ore (pitchblende) 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 site was partially remediated in two phases. Phase I was completed in 1978 and included removing plumbing and equipment and portions of floors, walls, and ceilings. Phase II, conducted from 1981 through 1983, consisted of removing all aboveground structures, including contaminated concrete foundations, drain lines, and soil, and shipping the waste and debris to the Nevada Test Site for disposal. This phase also included restoring the remediated portion of the site and installing 13 groundwater monitoring wells.

After Phase I and Phase II were completed, verification surveys and sampling identified localized areas that were contaminated with uranium, radium, and thorium. These areas included the previously filled railroad spur and a localized spot midway along the southern fence line. Remediation of this additional contaminated soil was conducted in 1996 under the Formerly Utilized



Location of the New Brunswick, New Jersey, Site

Sites Remedial Action Program (FUSRAP) and included excavating with heavy equipment, segregating contaminated soil using a segmented gate system, and shipping the soil by rail to a licensed disposal facility.

Regulatory Setting

The U.S. Atomic Energy Commission (AEC), a predecessor agency to the U.S. Department of Energy (DOE), established FUSRAP in March 1974 to evaluate radioactive contamination at sites where work was performed to develop the nation's nuclear weapons and early atomic energy program. After reviewing records and radiological surveys for more than 600 sites associated with the nuclear weapons program, DOE identified 46 sites that required cleanup, including the New Brunswick site. Congress transferred responsibility for FUSRAP site characterization and remediation to the U.S. Army Corps of Engineers (USACE) in 1997. DOE retains responsibility for long-term surveillance and maintenance of remediated FUSRAP sites.

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 21, 2001.

In fiscal year 2004, DOE transferred responsibility for the New Brunswick site from the DOE Office of Environmental Management to the DOE Office of Legacy Management (LM).

Current Site Conditions

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

An independent verification survey conducted after the completion of remedial action detected no residual radioactivity at the site that exceeded current guidelines. Therefore, on the basis of radiological conditions, DOE released the site for unrestricted use.

However, the New Jersey Department of Environmental Protection (NJDEP) determined that site soils had arsenic levels exceeding the state standard for arsenic in soil and requested additional groundwater sampling. USACE conducted additional groundwater and soil sampling, which demonstrated that ground water quality met applicable standards. DOE submitted a deed notice restricting excavation in the arsenic-contaminated soil. NJDEP concurred to the deed notice in 2011 and issued a decision that no further action was required. The excavation restrictions are binding on all future owners. USACE removed the monitoring wells in 2006.

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



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Legacy Management Activities

LM will conduct a site inspection every other year and will submit a biennial certification to NJDEP, as specified in the institutional control. The site was transferred to a private owner in November 2009. LM's responsibilities also include managing site records and responding to stakeholder inquiries.

Additional Information

Documents related to the New Brunswick site are available on the LM website at

http://www.lm.doe.gov/new_brunswick/Sites.aspx.

For more information about LM's activities at the New Brunswick site, contact

U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way, Grand Junction, CO 81503

(970) 248-6070 (monitored continuously), or
(877) 695-5322 (toll-free)