



Fairfield, Ohio, Site

This fact sheet provides information about the Fairfield, Ohio, Site. This site is managed by the U.S. Department of Energy Office of Legacy Management under the Formerly Utilized Sites Remedial Action Program.

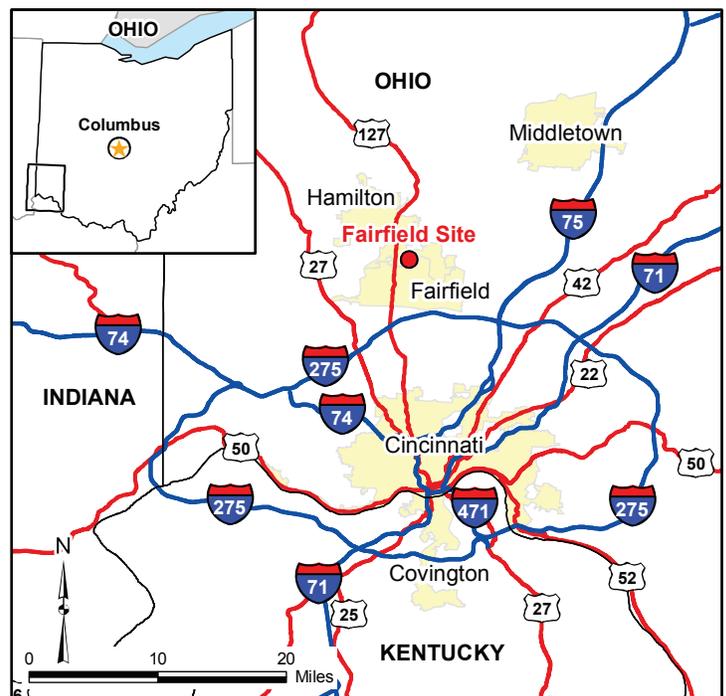
Site Description and History

The Fairfield, Ohio, Site (formerly the Associate Aircraft Tool and Manufacturing) is located at 3660 Dixie Highway, approximately 15 miles northwest of Cincinnati. The site comprises the former Associate Aircraft building and an exterior parking lot shared by two other companies. The machine shop is housed in a building approximately 20,000 to 25,000 square feet in area. Force Control Industries, Inc., purchased the site in 1969 from Dixie Machinery.

From February to September 1956, Associate Aircraft Tool and Manufacturing Company, a Cincinnati area machine shop, contracted with the U.S. Atomic Energy Commission (AEC) through the National Lead of Ohio (NLO) to machine and shape uranium metal for the Hanford, Washington, and Savannah River, South Carolina, nuclear reactors. The primary activities included machining, hollow drilling, reaming, and turning approximately 95,000 pieces of uranium stock to a final outside diameter. The contract expired in September 1956 and was not renewed.

From October through November 1956, under NLO supervision, Associate Aircraft decontaminated the site to levels considered acceptable at that time. After an intensive 5-week decontamination period, NLO conducted radiological surveys and determined that alpha radiation was well below applicable guidelines. A December 1956 decontamination report recorded contamination levels on machine surfaces exceeding current guidelines, but it was assumed (but not documented) that final disposition of the equipment complied with contractual requirements.

During a limited radiological survey in June 1992, uranium contamination was found in some concrete expansion joints and on several overhead horizontal surfaces. A radiological survey of the remainder of the property, conducted in



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Location of the Fairfield, Ohio, Site

September 1992, identified additional residual uranium contamination inside the building and in several small, isolated areas around the building. In 1993, the Fairfield site was designated for remedial action under the Formerly Utilized Sites Remedial Action Program (FUSRAP).

From December 1994 to June 1995, Bechtel National, Inc., the project management contractor for FUSRAP, defined the extent of contamination and performed remedial design engineering and remedial action at the Fairfield site.



New building addition at the Fairfield, Ohio, Site, May 2006

ThermoAnalytical (now Thermo NUtech) served as the radiological support subcontractor for sampling and analysis activities, and Oak Ridge National Laboratory was the independent verification contractor. Natural uranium isotopes were found to be the only material contributing significantly to contamination at the site. Supplemental limits were applied to residual uranium-238 that was left in place in soil beneath a concrete slab in a bay built in 1994 on the east end of the building.

All soils and residual radioactive materials from the building that exceeded site-specific health-based guidelines were removed from the site and disposed of as low-level radioactive waste at a licensed disposal facility in Clive, Utah. In addition, all lead-containing paint contaminated with residual radioactive material above site-specific criteria was removed from the site and managed as a mixed waste stream in accordance with applicable hazardous waste regulations. Asbestos-containing floor tiles contaminated with radioactive materials were also removed, packaged, and shipped to a commercial low-level radioactive waste disposal facility.

Regulatory Setting

AEC, a predecessor agency to 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 connected with the nuclear weapons program, DOE identified 46 sites that required cleanup, including the Fairfield site. Congress transferred responsibility for FUSRAP site characterization and remediation to the U.S. Army Corps of Engineers in 1997. DOE retains responsibility for long-term surveillance and maintenance of remediated FUSRAP sites.

The Fairfield 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 16, 1996.

In fiscal year 2004, DOE transferred responsibility for the Fairfield 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 Fairfield site is in compliance with applicable health-based 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, DOE released the site for unrestricted use. The site has been restored to a condition acceptable to the owner.

Legacy Management Activities

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

Contacts

In case of an emergency at the site, contact 911.

Documents related to FUSRAP activities at the Fairfield site are available on the LM website at <http://www.lm.doe.gov/fairfield/Sites.aspx>.

For more information about LM's activities at the Fairfield site contact:

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