

Joslyn Manufacturing and Supply Company Site

Fort Wavne, Indiana

U.S. ARMY CORPS OF ENGINEERS Buffalo District June 2020

Building Strong®

Formerly Utilized Sites Remedial Action Program

The Formerly Utilized Sites Remedial Action Program (FUSRAP) was initiated in 1974 to identify, investigate, and if necessary, clean up or control sites throughout the United States contaminated as a result of Manhattan Engineer District (MED) or early Atomic Energy Commission (AEC) activities. When implementing FUSRAP, the U.S. Army Corps of Engineers follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).



Historic aerial view of the Joslyn Site (looking north)

Site Description

The former Joslyn Manufacturing Company is in Allen County located in Fort Wayne, Indiana.

The site is located in an industrial setting at 2302 Taylor Street, with a Norfolk & Southern Railroad to the north, Taylor Street to the south, a drainage ditch (Junk Ditch) to the west, and commercial properties to the east bordering the site.

There are several residential, commercial, and industrial business areas within one mile from the site (e.g. churches, schools, and commercial business). Located northeast of the site is Swinney Park, a recreational area for the local community.

Site History

The former Joslyn Manufacturing Company was bought by Slater Steel Inc. in 1981 and operated until 2003 when the company went into Chapter 11 bankruptcy. In 2004 Slater Steel was purchased by Valbruna Steel, which separated the site into two separate companies Valbruna Slater Steel, Inc. (Valbruna) located at 2400 Taylor Street, and Fort Wayne Steel Corporation located at 2302 Taylor Street. Valbruna owns the buildings that are west of Building 10, which is approximately 40 acres in size while the Fort Wayne Steel Corporation owns the buildings east of and including Building 9, which is approximately 23 acres in size. (See figure next page.)

Areas involved in MED activities are designated by letters on the figure on the next page.



Joslyn Site Layout

In 1943, Joslyn Manufacturing and Supply Company entered into a contract with the University of Chicago to roll and machine uranium rods from billets. This contract was renewed annually until contract termination on June 30, 1946. The uranium billets were received by rail. Small furnaces were used to heat the material. Three mills and straightening, threading, and grinding equipment were used in the operation.

Additional documents indicate that the Joslyn Manufacturing and Supply Company fabricated approximately 15 tons of uranium rods for the British and Canadian governments beginning in August 1946. Documentation also exists that indicates that Joslyn continued to roll uranium rods until at least 1949 under MED contract. Under this contract, the Joslyn Manufacturing and Supply Company performed tempering, hot rolling, quenching, straightening, cooling, grinding, abrasive cutting, waste burning and threading of natural uranium billets into metal rods.

The site itself has been developed after the cessation of contracted operations with the addition of new buildings and additions to existing buildings used during uranium-billet shaping operations. The majority of the site is covered by either concrete or asphalt with very little accessible vegetation. The floors of most of the buildings used during contracted operations are a mixture of concrete and stone.

In 2004, the U.S. Department of Energy determined that the Joslyn Manufacturing and Supply Company Site (hereafter Joslyn Site) was potentially eligible for inclusion in FUSRAP.

The potential contaminants of concern at the site due to the MED processes performed include uranium and thorium and their associated daughter products.

Corps of Engineers Activities

2005 - Preliminary Assessment: In 2005, the Corps of Engineers completed a preliminary assessment for the Joslyn Site. The purpose of the assessment was to review information to determine if the site posed a potential threat to human health or the environment, or if there was a need for further action by the Corps of Engineers under FUSRAP. Based on the preliminary assessment, there is evidence that FUSRAP-eligible hazardous substances, resulting from contract-related activities at the site, may have migrated from on-site buildings, but does not pose an imminent threat to human health, safety and the environment. The preliminary assessment determined that the potential for a future threat to human health and the environment would need to be evaluated.

- **2007 Site Inspection:** The Corps of Engineers completed a site inspection for the Joslyn Site in 2007. The principal goal of the site inspection was to determine whether or not there was a release or is a threat of a release of radiological contamination related to MED activities at the Joslyn Site that could pose a threat to human health or the environment. To determine this, during the site inspection, soil and ground water investigations were conducted.
- **Soil** The data indicate that there are areas within the former Joslyn Site soils that are adversely impacted with isotopic uranium from work performed under contract. The three highest isotopic uranium concentrations were reported in samples collected from one of the suspected burn pit areas, an exterior area located north of Building 8 and east of Building 9. This constitutes a release to the environment under CERCLA guidelines. There is the potential for on-site receptors (site visitors and workers) to have exposure to contamination in near-surface site soils via incidental ingestion of soils, inhalation of fugitive dust, and external gamma radiation. The isotopic thorium results for soil are below screening level values once background is considered.

- **Air** The potential for the air migration pathway release of radionuclides associated with the contract activities on the site is low. Despite the limited access to potentially contaminated soils, for the purposes of the site inspection, it was assumed that incidental soil ingestion, inhalation of fugitive dust, and exposure to external gamma rays are complete exposure pathways for site workers.
- **Groundwater** The groundwater data does not indicate a release of radiological contaminants to the site and regional groundwater.
- **Surface Water** The lack of groundwater contamination and the localized near-surface soil contamination indicates that off-site migration has not occurred or is negligible.

The 2007 site inspection recommended that further evaluation of the radiological contamination at the Joslyn Site be conducted.

Status of the Site

During 2019, the Corps of Engineers awarded a contract to perform a remedial investigation at the Joslyn Site. The investigation is scheduled to begin in June 2020. During the investigation the contractor will be collecting soil, groundwater, and surface water samples and completing radiological scans of the on-site buildings that were used during the historic MED and AEC activities. This sampling will help determine the extent of FUSRAP-related materials and the potential for those materials to be transported through soil, groundwater, and surface water. Corps' engineers and scientists will then assess the potential human health and ecological risks from FUSRAP-related materials in the environment.

The Corps' FUSRAP priorities are to be protective of human health and the environment, to ensure that work is conducted in a safe and efficient manner, and prevent the spread of contamination.

Administrative Record File

The Corps of Engineers is in the process of developing an administrative record file, which will contain documents that will form the basis for the selection of response actions at the Joslyn Site.

U.S. ARMY CORPS OF ENGINEERS – BUFFALO DISTRICT ENVIRONMENTAL PROJECT MANAGEMENT TEAM

1776 NIAGARA STREET, BUFFALO, N.Y. 14207 Phone: 800-833-6390 (Option 4)

Email: fusrap@usace.army.mil

Website: https://www.lrb.usace.army.mil/Missions/HTRW/FUSRAP/Joslyn-Manufacturing-and-Supply-Co-Site/