The Nease Chemical Site is located in Columbiana and Mahoning Counties, Ohio and is approximately 2.5 miles northwest of the town of Salem. The Site covers approximately 44 acres most of which are contaminated with several hazardous substances. In addition to the Site, approximately 36 miles of the Middle Fork of Little Beaver Creek (MFLBC) have been contaminated.

The Nease Chemical Company owned and operated a chemical manufacturing plant from 1961 through 1973, which produced pesticides (including Mirex), fire retardants, cleaning compound, and chemical intermediates used in agricultural, pharmaceutical, and other chemical products. Five unlined ponds were used for the treatment and storage of acidic plant wastes or lime slurries from the neutralization of the acidic wastes. Starting in 1969 and continuing to 1973, neutralized liquids were discharged to the Salem Wastewater Treatment Plant after settling in the ponds. Surface water drainage flows via Feeder Creek entering the main surface water body in the area, the MFLBC. During and after the operation of the chemical plant, the waste ponds and contaminated soil were an ongoing source of contamination to the creeks. A site-specific “fingerprint” chemical, Mirex, as well as associated chemicals such as photomirex and kepone, were detected in Feeder Creek in surface water and sediment, and in MFLBC floodplain soil, sediment, and biota. Shortly after a consent decree judgment in 1973 with Ohio EPA, Nease closed the facility. On December 30, 1977, Nease Chemical was acquired by Rutgers Chemicals, Inc. to form Rutgers Organics Corporation (Rutgers). Rutgers never operated at the Site. The Site was added to the National Priorities List (NPL) on September 30, 1983. U.S EPA began remedial action planning and divided the site into three OUs (Operable Units).

The primary contaminants of concern are Mirex in the surface water, soil, and sediment, and volatile organic compounds (VOCs) in the groundwater.

The natural resource trustees (Trustees) for the Site are the U.S. Department of the Interior, acting through the U.S. Fish and Wildlife Service (FWS) and the State of Ohio, acting through the Ohio Environmental Protection Agency (OEPA). Natural resources affected by the release of the hazardous substances in the Assessment Area include: floodplain soils, sediments, surface and ground water, and biological resources, such as aquatic/wetland and terrestrial plants; benthic, aquatic, and terrestrial invertebrates; fish; migratory birds, including but not limited to waterfowl, and their supporting habitats; and mammals, including the threatened northern long-eared bat and the endangered Indiana bat.

The State of Ohio issued fish consumption advisories in 1987 for Mirex, and in 1988, the State issued a contact advisory warning (Do Not Swim or Wade) for Mirex for the MFLBC. These advisories were lifted in 2011 after sediment removal and cleanup was complete.

The MFLBC flows through Columbiana and Mahoning Counties in Ohio. Heavy development characterizes valley areas and scattered level topographies. However, remaining wetlands, forested riparian areas, and upland forests exist between the Site and the first low-head dam at Lisbon, Ohio. Downstream of Lisbon, Ohio, portions of the MFLBC, the North Fork of Little Beaver Creek and the West Fork of Little Beaver Creek are Federal and State designated Scenic and Wild Rivers.

FWS and OEPA signed a Trustees’ Memorandum of Understanding, effective July 22, 2010, to coordinate natural resource damage assessment and restoration activities.

On September 9, 2016, the United States on behalf of the DOI and US EPA, and the State of Ohio on behalf of OEPA, filed a complaint and consent decree (CD) in the U.S. District Court for the Northern District of Ohio (the Court) against Rutgers for response costs, performance of response actions and for natural resources damages. The combined CD was approved by the Court on December 22, 2016.

The NRDA portion of the CD provided for Rutgers to pay $195,000 past assessment costs to DOI, and $375,680 to the State of Ohio and for Rutgers to perform restoration.

Restoration included the removal of the Lisbon low-head dam, providing enhanced warm water habitat for 240 river miles of stream. The removal of the low-head dam increased fish habitat and diversity, provided enhanced recreational opportunities to the community, and expanded the scenic river designation for the MFLBC. Invasive plant species were removed, and native plant species were planted as needed. A conservation easement was placed on 3 acres of riparian habitat adjacent to the dam within the Village of Lisbon’s Willow Park.

The CD required that Rutgers place $366,000.00 in a conservation trust to conserve at least 153 acres of land in the Little Beaver Creek watershed and the City of Salem drinking water source areas which are subject to increased development pressure, thus protecting important wetland and riparian habitat. In addition, Rutgers donated and preserved seven acres of wetland, riparian and upland habitat of natural area within the footprint of the former Nease facility though the placement of an Environmental Covenant.

As part of the requirements of the consent decree between US EPA and Rutgers, Rutgers agreed to implement US EPA’s OU 2 and OU 3 remedies at the Site estimated to cost $18.75 million.

The dam removal of the Lisbon low-head dam and associated restoration activities was completed and subsequently approved by the Trustees in October 2017. A Conserved Lands Work Plan was approved by the Trustees. Multiple properties which met the requirements of the Conserved Lands Work Plan were identified and placed under Conservation Easements to be protected and preserved in perpetuity. A Final Completion Report for Restoration was submitted by Rutgers to the Trustees and approved on April 26, 2023. All requirements set forth in the Consent Decree were determined to have been met.