



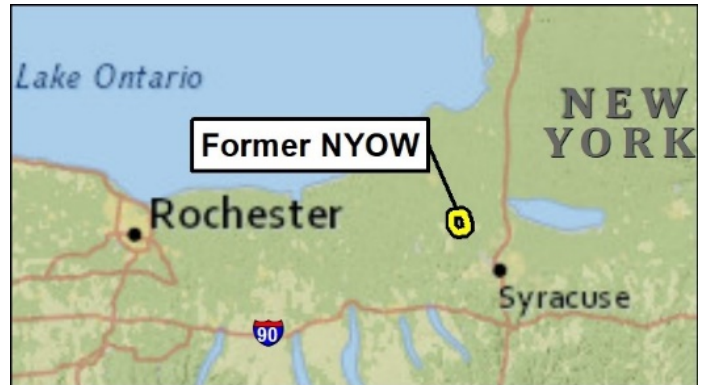
# Former New York Ordnance Works Onondaga County, New York

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## SITE HISTORY

The former New York Ordnance Works (NYOW) facility is located in Onondaga County, New York, near the Finger Lakes, about one-mile northeast of the town of Baldwinsville and approximately 13 miles north of Syracuse, New York. The facility was designed to manufacture 60,000 pounds of ammonium picrate per day, seven days a week near the end of World War II. Ammonium picrate, also known as Dunnite or “Explosive D”, is an explosive compound used in the production of armor piercing shells.



Map displays location of the former New York Ordnance Works.



Historical New York Ordnance Works marker.

The federal government acquired the 6,795-acre property and completed construction of the facility in May 1943. The facility consisted of an Administration area, Ammonium Picrate area, Acid area, Landfill area, Bunker area and a Power Plant area. It encompassed approximately 2,100 acres of the property with the remainder as farmland. The National Aniline Defense Corporation, a Division of Allied Chemical and Dye Corporation, operated the facility under supervision of the Chief of Ordnance of the War Department. The facility shut down and manufacturing operations ceased in less than a year in March 1944.

Chemicals used or produced on-site during operations included dinitrochlorobenzene (DNCB), 2,4-dinitrophenol (2,4-DNP), picric acid (2,4,6-trinitrophenol), sulfuric acid, nitric acid, sodium hydroxide, aqueous ammonia, and ammonium picrate. There are no documented spills in the historical records for the site. However, in an abundance of caution, the site will be assessed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 to confirm that no contaminants spilled or leaked onto the ground from processes and equipment during the ammonium picrate operations.



Historical photo of the former Bunker area.

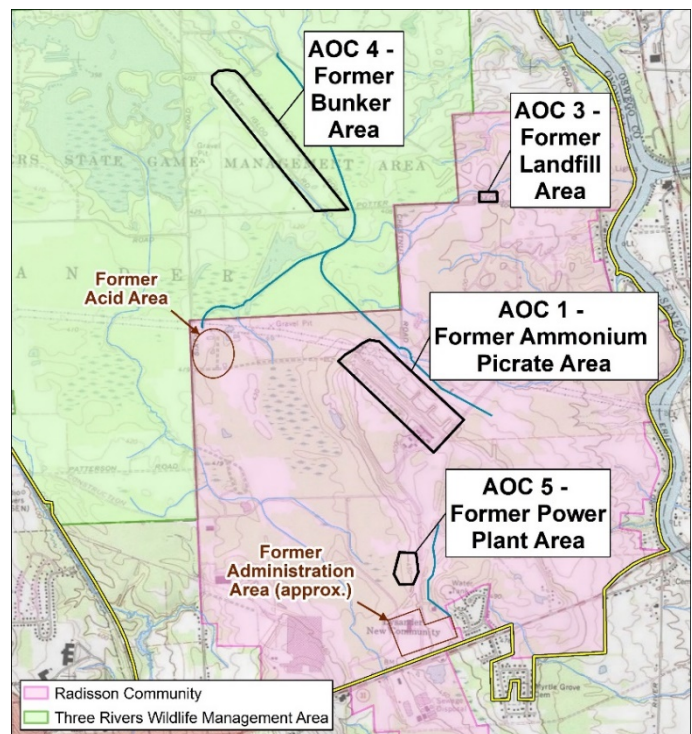
## **HISTORICAL USE and FUDS ELIGIBILITY**

In 1946, the federal government began to transfer the property to private entities; some of the land was classified as farmland and some as industrial property. The 4,495 acres in the northern and western parts of the facility were sold, with 1,895 acres as farmland to private owners, and 2,600 acres to New York State Department of Environmental Conservation (NYSDEC) for the Three Rivers State Wildlife Management Area (WMA). The remaining land was classified as industrial property and sold to private owners. The industrial property eventually became what is now known as the Radisson Community.

The former Bunker Area is owned by NYSDEC and is located within the WMA. From the early 1970s to 1983, two of the 14 bunkers were used by NYSDEC personnel for the storage of pesticides. The other bunkers were used by NYSDEC for storage and maintenance equipment. In 1993, NYSDEC completed remedial activities for bunkers #3 and #8, which included sealing all concrete surfaces with polyurethane, removal and disposal of soil from the gravel driveways in front of each bunker, backfill of the excavated areas, and the demolition, filling and capping of the bunkers.

In the early 1990s, NYSDEC also completed response actions to address the facility's acid tanks. NYSDEC removed accumulated debris and corrosive water from the former facility's five acid tanks, added limestone to each tank to neutralize the acid and installed drainage holes in the tank sides.

Some sites, formerly used by the Department of Defense (DoD), are eligible to be cleaned up by the government under the Defense Environmental Restoration Program, Formerly Used Defense Sites (DERP-FUDS). In the 1990s, the U.S. Army Corps of Engineers (USACE) completed a preliminary assessment of the former NYOW to determine eligibility. Four areas of concern (AOCs) were identified for future groundwater and soil investigations: AOC 1 - former Ammonium Picrate area, AOC 2 - former Acid area, AOC 3 - former Landfill area, and AOC 4 - former Bunker area. In 2020, AOC 5 – former Power Plant area was identified for future groundwater and soil investigation.



*Former NYOW areas of concern (AOCs).*

In 1991, NYSDEC conducted an emergency response action at AOC 2 - former Acid area rendering it ineligible for cleanup under DERP-FUDS. Therefore, four AOCs are part of the current investigation plans for the former NYOW site.

## **CURRENT USE**

The former NYOW is currently occupied by the Radisson Community, Three Rivers State WMA, and 1,895 acres that were subdivided among 98 individual private owners.

The Radisson Community is a planned development that consists of approximately 3,500 homes, a large Corporate Park, and a wide range of recreational, educational, cultural, shopping, and community

services. The Radisson Corporate Park provides building sites for industry and offices. To date, 40 firms employing 2,500 people have located to the Park. These firms produce products as diverse as beer, plastic containers, printing, and electronic components. The Seneca River borders the community on the east, Three Rivers WMA borders the community on the north and west, and New York state Route 31 borders the area on the south.

Three Rivers WMA is owned by the NYSDEC and was named for its proximity to the junction of the Seneca and Oneida Rivers, which form the Oswego River. The WMA is flat and poorly drained, with fields, woods, ponds, and marshes. It is used primarily for hunting, fishing, hiking, and bird watching.

**AOC 1 - Former Ammonium Picrate area.** The former Ammonium Picrate area is located within a section of the Radisson Community in a primarily residential area including sections of undeveloped land. Homes are not built on areas of potential impacts; however, paved walking paths and grassy areas wind between homes and wooded areas containing the old loading ramps, storage bunkers, and



*Former Ammonium Picrate area, June 2018.*

loading dock structures. Old concrete structures in disrepair exist in wooded areas of varying density. Eastern deciduous forest is still present on-site as a natural terrestrial habitat. A large forested wetland is located west of the Ammonium Picrate area. The majority of the Ammonium Picrate area structures have been demolished, but some structures remain including ramps and foundations.

**AOC 3 - Former Landfill area.** The former Landfill Area is also part of the Radisson Community. Golf course facilities including a section of a fairway, a clubhouse, parking lots, and storage buildings are currently located within the former Landfill area. The landfill was used by the Department of Defense

(DoD) for the disposal of household and office trash, paint cans, stainless steel “spiders” (e.g., equipment used to mix the ammonium picrate), and potentially other manufacturing items.

**AOC 4 - Former Bunker area.** The former Bunker area is located within the Three Rivers WMA. Twelve of the 14 bunkers remain intact. NYSDEC is currently using several of the remaining bunkers for equipment and vehicle storage.

**AOC 5 - Former Power Plant area.** The former Power Plant area is located north of the former Administration area. This area is currently undeveloped land within the Radisson Community.

**Former Acid area.** The former Acid area is located off Route Sixty within the Radisson Community. It is currently mostly wooded with a cleared, laydown area used by the town of Lysander to store road construction materials.

**Former Administration area.** The former Administration area is located on the southern portion of the

NYOW facility to the north of Route 31 and to the east of Route 631. This area is utilized by public and private entities, such as Lysander Parks and Recreation, a church and commercial businesses.

## **ENVIRONMENTAL INVESTIGATION ACTIVITIES**

The most comprehensive environmental investigations conducted at the former NYOW were completed in 1981 and 1989. The investigations detected some constituents, such as chromium, lead, arsenic, semi-volatile organic compounds and explosives in soil and groundwater. The data collected during these investigations is insufficient to assess risk due to its age and sampling distribution. Based on historical information and previous environmental investigations, four AOCs have been identified for future groundwater and soil investigations. They are AOC 1 - Former Ammonium Picrate area, AOC 3 - Former Landfill area, AOC 4 - Former Bunker area, and AOC 5 – Former Power Plant area.

## **FUTURE WORK**

USACE will further investigate the three identified AOCs at the former NYOW facility under the DERP-FUDS, authorized by the Superfund Amendments and Reauthorization Act of 1986. In the fall 2020, USACE will begin on-site investigation activities to further characterize the impacts to groundwater and soil related to former DoD activities. On-site investigations will continue for approximately 1-2 years to collect data, assess risk to human health and the environment. If unacceptable risk is found, USACE will conduct a feasibility study to evaluate possible remedial action alternatives.



*Former Bunker area, June 2018.*

## **COMMUNITY OUTREACH**

USACE will provide community outreach opportunities to interested stakeholders which will include a community survey and public meetings. Environmental reports and studies developed as part of the investigation will be available at the Baldwinsville Public Library and USACE, New England District.

### **How to Contact Us:**

If you have questions or comments about the environmental investigation activities, please contact:

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