

**RCRA PART 373 PERMIT
EXECUTIVE SUMMARY/FACILITY FACT SHEET**

**U.S. Department of Energy
Knolls Atomic Power Laboratory
NY6890008992**

**Niskayuna, New York
Schenectady County**

May 2024

1.0 FACILITY PERMIT AND GENERAL INFORMATION

1.1 Facility Permit Information

Permittee Name:	USDOE-Naval Reactors Laboratory Field Office
Facility Name:	USDOE Knolls Atomic Power Laboratory – Knolls Laboratory
Facility Location:	2401 River Road, Niskayuna, NY 12309
EPA ID No.:	NY6890008992
DEC Permit No.:	4-4224-00024/00001
DEC DER No.:	447017
Commercial/Non-Commercial TSDF:	Non-comm
Facility Contact:	David A. Delwiche david.delwiche@nrp.doe.gov 518-398-6366
DEC Contact/Responsible Permit Writer:	Frank Zhang frank.zhang@dec.ny.gov 518-402-8755
Initial/Renewal Permit (Permit type):	Renewal (Operating)
Permit Term:	10 years
Estimated Closure Cost:	N/A
Estimated Post-Closure Care Cost:	N/A
Estimated Corrective Action Cost:	N/A
Estimated Financial Assurance Cost:	N/A
On-site Environmental Monitor(s):	N/A

1.2 General Description

The Knolls Laboratory is owned by the U. S. Department of Energy (USDOE) and operated for the Government under contract. The principal function of the Knolls Laboratory is research and development in the design and operation of naval nuclear propulsion plants. The Knolls Laboratory consists of laboratory buildings, offices, a warehouse, shops, cooling towers, a boiler house for centralized heating, and a river pumping station for non-contact cooling water. The Knolls Laboratory also consists of roads and parking lots paved with asphalt and concrete. The Knolls Laboratory's operations are located in two principal areas. The larger area is at the top of the bluff on the northwesterly section of the property and is called the "upper level." The smaller area is located on the "lower level" bench adjacent to the Mohawk River and encompasses the DOE-EM SPRU facility. The two areas occupy about 60 acres (35%) of the property. The balance of the Laboratory consists of woods and fields. The surrounding area is a mixture of open land, other research and development/light industry, parks, municipal facilities, and low-density suburban residential housing.

Various types of both hazardous waste and mixed waste are produced at the Knolls Laboratory. The sources of these wastes are primarily from either byproducts from work in the research and development laboratories or resultant from demolition and refurbishment operations that occur throughout the Knolls Laboratory. Information regarding all chemicals managed at the site are within the Part A application and manifest data.

1.3 Background Information

The Facility is currently operating as a storage facility for hazardous waste.

The hazardous and mixed wastes that are generated during normal operations are managed within four units at the Knolls Laboratory for periods exceeding 90-days. There is no disposal of hazardous or mixed waste at the Knolls Laboratory. The Knolls Laboratory only stores and processes all of the hazardous/mixed waste it manages for shipment to off-site, licensed/permitted treatment, storage and/or disposal facilities.

1.4 Site Maps

The following figures are attached to this executive summary/permit:

- Figure ES-1. General Location Map
- Figure ES-2. Facility Boundary Map

1.5 Other Facility Permits

The following federal, state and local permits and registrations are applicable to the facility:

- NYSDEC SPDES Permit No. NY0005851;
- NYSDEC SPDES MS4 Permit No. GP-0-24-001;
- NYSDEC SPDES Construction Activity Permit No. GP-0-20-001;
- NYSDEC Air State Facility Permit No. E-4-4224-00024/00039;
- NYSDEC Water Withdrawal Non-public Permit No. E-4-4224-00024/00052;
- NYS Canal Corp. Real Estate Permit No. C-OC-201800134;
- NYS Cana Corp. Canal Work Permit No. C-WK-202200051;
- EPA NESHAPS Permit No. KAPL-2012-003

2.0 RCRA PERMITTED UNITS

(Operating Permit Language) The following table is a summary of RCRA-permitted Operating Units by unit type (S-Storage; T-Treatment; D-Disposal)

Unit Type ¹	No. of Areas/Units	Activity Type	Waste Type ²	Quantity
Containers (S01)	4 units	Storage	Solid & Liquid Hazardous and Mixed Wastes	17,700 gallons

Footnotes:

1. Unit codes are as described in the Part A Application.
2. Specific waste types and waste codes are presented in Attachment C – Waste Characteristics of this Permit.

3.0 CORRECTIVE ACTION SUMMARY

The following table summarizes the ongoing corrective action activities occurring at the facility:

Location Name / Designation	Activity Description
Entire Facility	Monitoring of soil and groundwater is required for the entire Facility.
Q3 Yard Area	RFI/ICM activities are in progress in this area.
Land Disposal Area	A final remedy has been selected and is being implemented for the land disposal area, which consists of multiple SWMUs outside and east of the Site's upper level.
H1 Cooling Tower	RFI Work Plan preparation is ongoing and RFI activities are planned for this area near-term.
H2-G2 Area	ICM Work Plan preparation is ongoing and ICM activities are planned for this area near-term.

4.0 SITE MANAGEMENT

4.1 Institutional Controls

The Facility is managed under this Permit and various other environmental permits as described above to prevent exposure to contamination and/or restrict migration of contamination.

4.2 Engineering Controls

The developed portion of the site is covered with asphalt and enclosed with a fence.

5.0 ISSUES AND CONCERNS

The following sections describe any potential issues or concerns for the facility related to its hazardous waste permit. Additionally, it includes information on any major changes made between the last issued permit and this renewal permit.

5.1 Environmental Risk Assessment

The Facility was investigated as part of the 1998 RCRA Facility Assessment Preliminary Review - Visual Site Inspection (RFA PR-VSI), included in Module II, Appendix E of the Permit, and subsequent RCRA Facility Investigations (RFIs). Based on these investigations, it was determined that contamination at the Facility did not pose imminent danger to human health or the environment, but that corrective action was required to control risks to health and environment.

Corrective action programs have been implemented to clean up, restrict migration of, and prevent exposure to contamination.

5.2 Climate Leadership and Community Protection Act (CLCPA)

Pursuant to the requirements of Section 7(2) of the CLCPA, during its review of the permit renewal application the DEC has taken into consideration information regarding the facility's consistency with the CLCPA.

5.3 Climate Risk and Resilience Act (CRRA)

The Facility has demonstrated to the DEC that future physical climate risk, not limited to sea-level rise, storm surge and flood, was considered during the permit renewal process. The DEC has made a tentative assessment that the Facility is not at risk of adverse climate change impacts due to extreme weather events, and no additional actions are necessary at this time to improve the resiliency at the facility.

5.4 Unresolved Issues and Concerns

There are no unresolved issues or concerns with the Facility.

5.5 Compliance Schedule Items

The Permittee has not proposed to incorporate any items into the Permit renewal.

5.6 Public Participation

The draft RCRA Part 373 Renewal Permit will have a 45-day public notice comment period. Renewal Application documents and the draft RCRA Part 373 Renewal Permit as well as other pertinent documents are accessible at DEC Info Locator (<https://www.dec.ny.gov/data/DecDocs/447017/>) or at the facility's repository (2400 Nott Street East, Niskayuna, NY 12309). If no comments are received, the draft permit shall be issued as final. If comments are received, they shall be address in either a Response to Comments document or a direct response letter to the commentor(s).

5.7 Significant Permit Modifications

Corrective action responsibilities for all SWMUs and AOCs previously transferred to DOE-EM management except for SWMU-085, which is remaining under DOE-EM management under DEC Permit #4-4224-00024/00055, are being reassigned to the Permittee (DOE-NRLFO).

The Department has made minor modifications to the Permit to update formatting, implement any new regulatory requirements and address technical concerns raised during the renewal process.

5.8 Upcoming Construction/Closure Activities

Various non-RCRA related construction is occurring at the Facility, and any necessary corrective action as a result will be covered under this Permit. Construction of the soil cover for the Land Disposal Area will be occurring. There are no anticipated closures of any operating units during the life of this Permit.

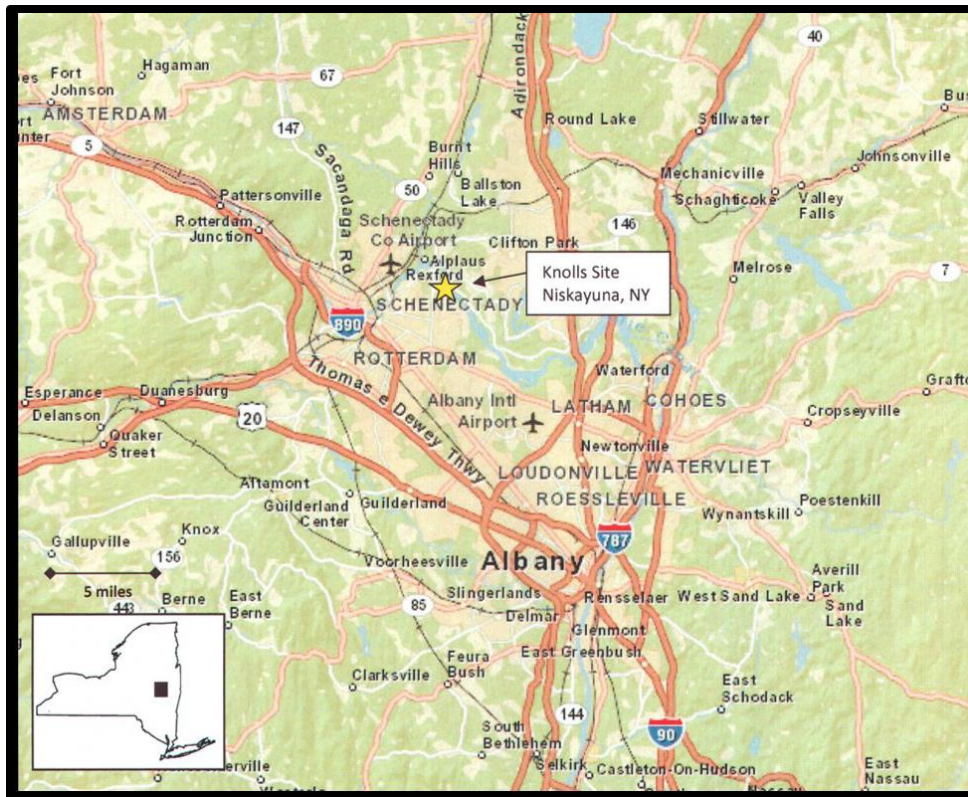


Figure ES-1. General Location Map

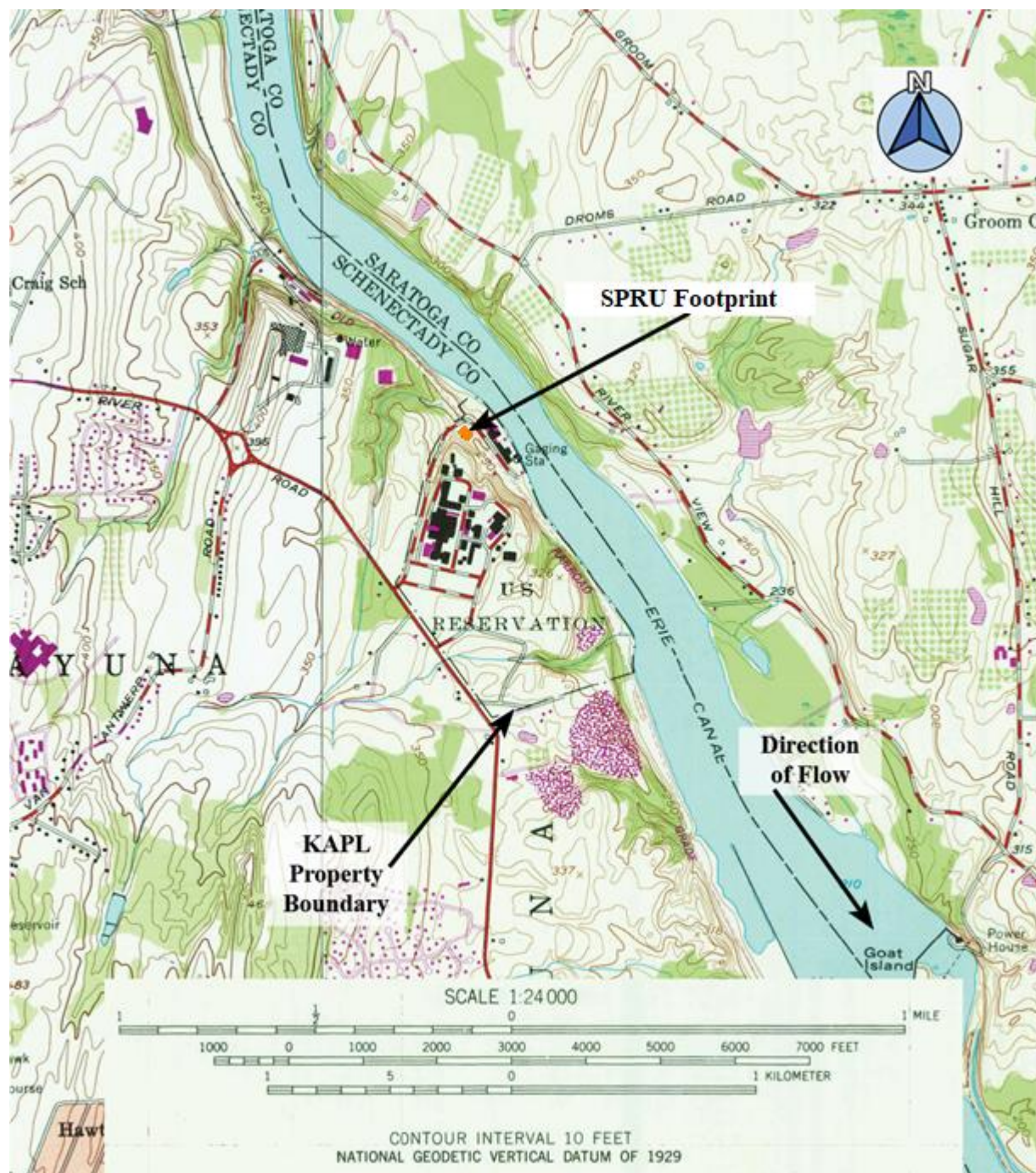


Figure ES-2. Facility Boundary Map (SPRU Property in orange)