

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

**US Department of Energy
Environmental Management
Separations Process Research Unit
NYR000096859**

**Niskayuna, New York
Schenectady County**

April 2024

1.0 FACILITY PERMIT AND GENERAL INFORMATION

1.1 Facility Permit Information

Permittee Name:	Department of Energy, Environmental Management
Facility Name:	DOE SPRU Field Office
Facility Location:	2425 River Road, Niskayuna, NY 12309-7100
EPA ID No.:	NYR000096859
DEC Permit No.:	4-4224-00024/00055
DEC DER No.:	447011
Commercial/Non-Commercial TSDF:	Non-Comm
Facility Contact:	Martin P. Krentz martin.krentz@emcbc.doe.gov 518-395-4580
DEC Contact/Responsible Permit Writer:	Frank Zhang frank.zhang@dec.ny.gov 518-402-8755
Initial/Renewal Permit (Permit type):	Renewal - Corrective Action; Initial - Operating (Storage)
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 Separations Process Research Unit (SPRU) is operated under contract with the United States Department of Energy (DOE) as administered by DOE-Office of Environmental Management (EM) and is a United States Government owned facility.

The former SPRU facility occupied about 3 acres of the 170-acre United States DOE Knolls Atomic Power Laboratory (KAPL) Site in Niskayuna, New York. The SPRU facility was a small-scale pilot plant operated from 1951 through 1953 to research the chemical process to separate uranium and plutonium from irradiated materials prior to the Naval Nuclear Propulsion Program (NNPP) mission at the KAPL Site. This pilot plant consisted of a processing building (G2), a waste management facility (H2), a tank farm, and pipe tunnels connecting the facilities. The SPRU Disposition Project (SPRU-DP) was established by DOE to disposition the facilities, soil and groundwater contamination at the SPRU facility. The last part of required remediation was completed in 2019, and the former SPRU facility area was transferred to the Office of Naval Reactors for continued NNPP use.

Information regarding all chemicals managed at the site are within the Part A application and manifest data.

1.3 Background Information

In 2015-2016, during decontamination and decommissioning (D&D) activities in G2 and H2, materials were discovered in the G2 and H2 buildings that, upon removal, were determined to have the characteristics of, and are being managed as, mixed transuranic (MTRU) waste. As the MTRU waste managed at the SPRU site was generated from ongoing D&D activities, and the D&D activities are complete, no additional or newly generated hazardous or mixed waste streams are anticipated. The waste at SPRU consists primarily of contaminated sump sediments, floor scrapings, piping and components. While SPRU possesses a corrective action permit (#4-4224-00042/00055) from the New York State Department of Environmental Conservation (NYSDEC), SPRU has no existing permit or agreement with the NYSDEC for storage of MTRU waste. On October 29, 2015, DOE formally notified NYSDEC that, due to temporary and uncontrollable circumstances, it was not able to ship MTRU waste offsite within the required 90-day generator storage limit specified at 6 NYCRR 373-1.1(d)(1)(iii). DOE requested a 30-day extension for storage of the waste which NYSDEC granted on November 17, 2015 (an extension of up to 30 days may be granted on a case-by-case basis in accordance with 6 NYCRR 373-1.1(d)(1)(iii)(e)). DOE continued to request 30-day extensions from NYSDEC. An Administrative Order on Consent (Order) between NYSDEC and DOE was executed on February 5, 2018, authorizing storage of the MTRU wastes in a Temporary Accumulation Area, TAA-003. TAA-003 has since been designated by NYSDEC as Solid Waste Management Unit (SWMU)-085. The MTRU waste in TAA-003 is stored in containers of various sizes which are then stored in four metal Conex boxes

(SeaLand containers) for radiation shielding and weather protection. There are appropriate warning signs at all entrances to TAA-003.

1.4 Site Maps

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

- Figure ES-1. Site Location Map
- Figure ES-2. Facility Footprint

1.5 Other Facility Permits

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

- EPA Rad NESHAP App. Construct/Modify: No. KAPLSRUPVU001

2.0 RCRA PERMITTED UNITS

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)	1 area 1 unit	Storage	Solid & Liquid Mixed Wastes	24,600 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	Estimated Completion Date
Entire Facility	No current corrective action is required as all previously required corrective action has been completed.	N/A

4.0 SITE MANAGEMENT

4.1 Institutional Controls

The site is managed under a Part 373 permit.

4.2 Engineering Controls

The site is enclosed by a chain-link fence to prevent accidental or unauthorized exposure to hazardous wastes.

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

There are no current concerns for environmental risk from the Facility.

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 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 and 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/447011/>) 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 addressed in either a Response to Comments document or a direct response letter to the commentor(s).

5.7 Significant Permit Modifications

The Permittee has submitted an application to renew the previous corrective action permit and to add a new RCRA operating unit for the storage of hazardous wastes.

The Permittee has made modifications to managed SWMUs under corrective action. These changes reflect the completion of corrective action activities and the transition of certain SWMUs to management by DOE-NRLFO under their Part 373 RCRA permit.

5.8 Upcoming Construction/Closure Activities

No construction outside of typical maintenance is expected at the Facility.

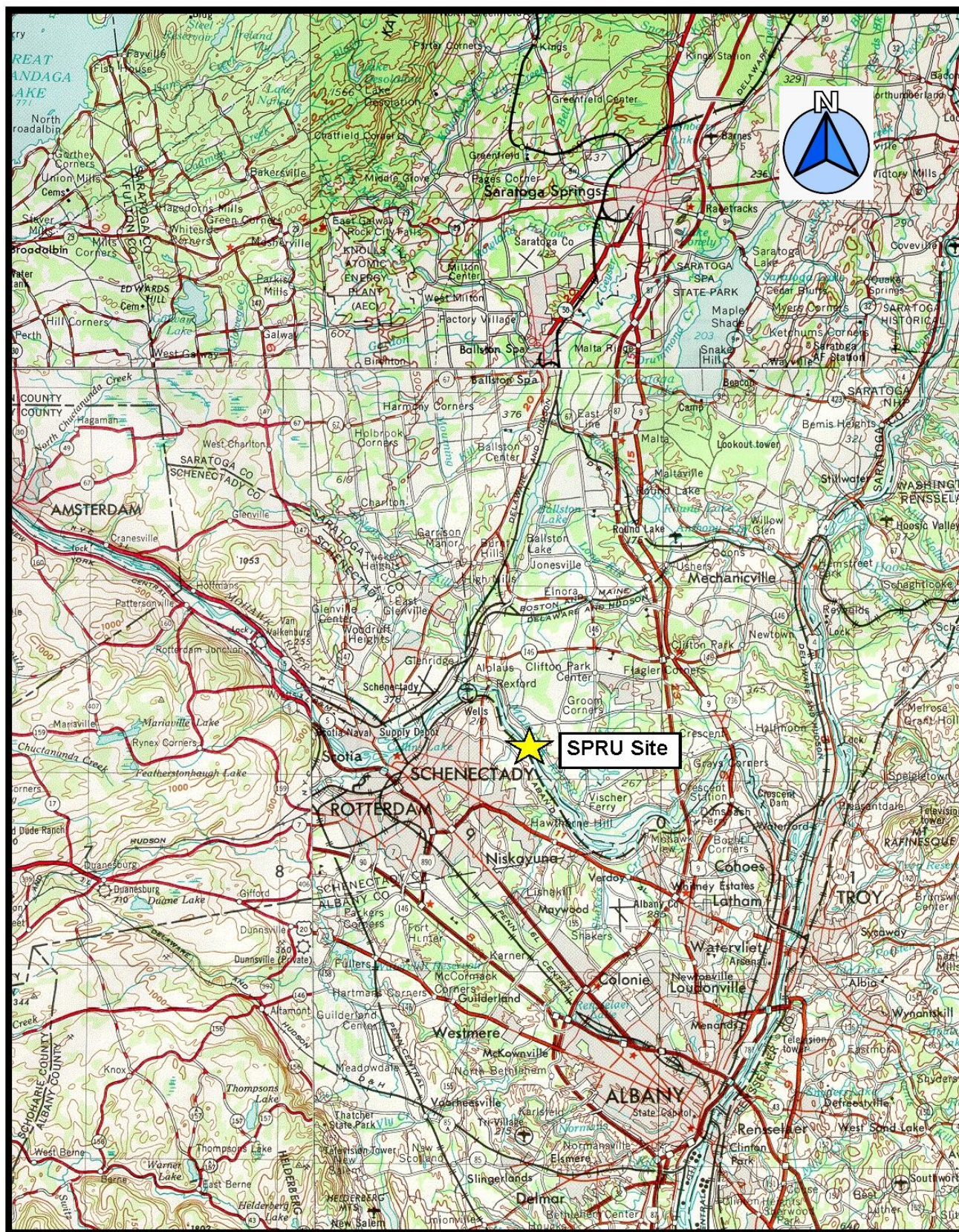


Figure ES-1. Site Location Map

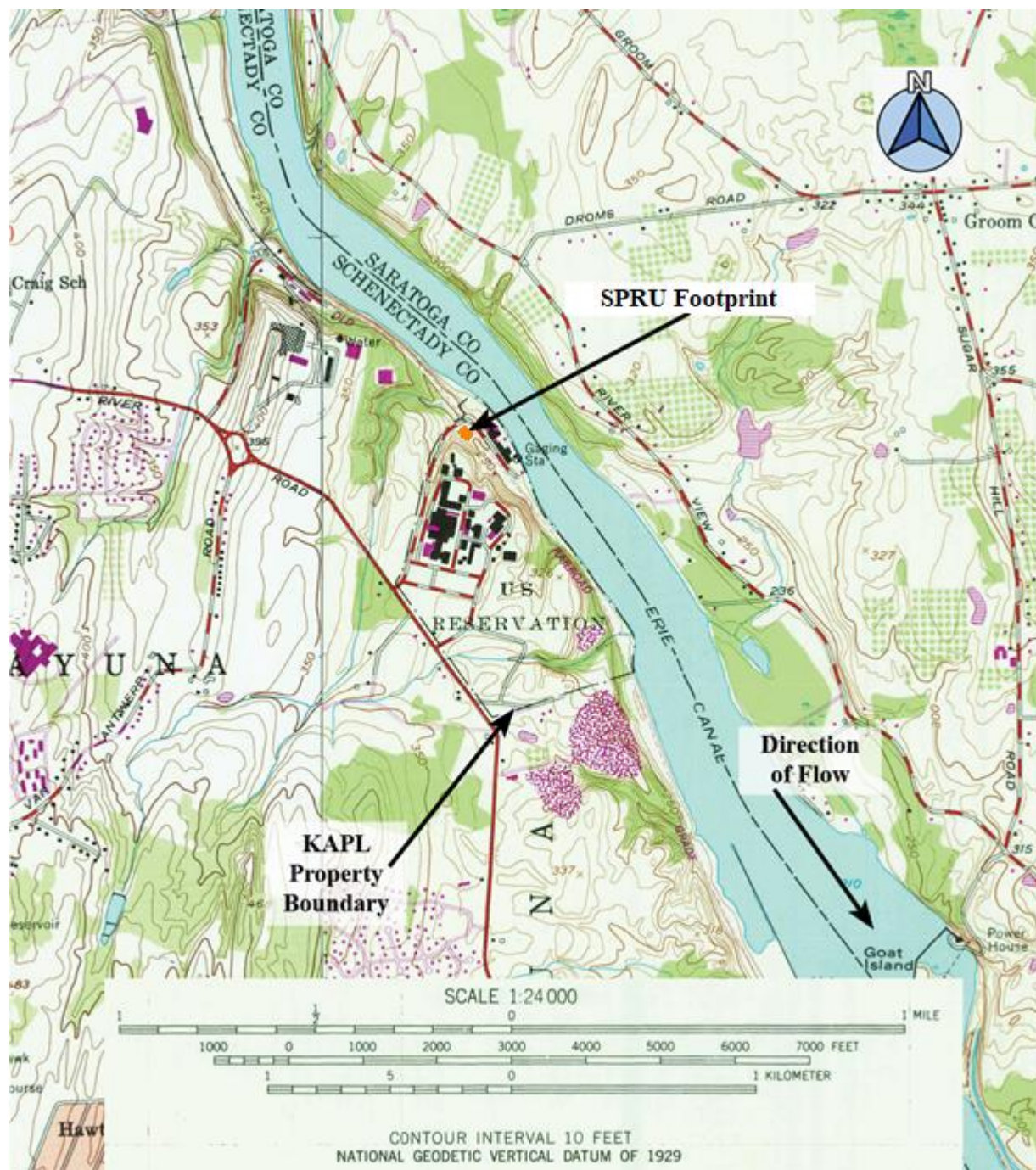


Figure ES-2. Facility Footprint Map (SPRU Property in orange)