Constellation.

Environmental Protection Plan

NMP1L3591
May 28, 2024

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Nine Mile Point Nuclear Station, Units 1 & 2
Renewed Facility Operating License No. DPR-63, NPF-69
Docket Nos. 50-220, 50-410

Subject: Response to NY State Pollutant Discharge Elimination System (SPDES) Permit Request for Information & Modification Request

Enclosed is a copy of the Nine Mile Point Nuclear Station (NMPNS) responses to the New York State Department of Environmental Conservation (NYSDEC) Request for Information (RFI) regarding the comprehensive review of the SPDES Permit under the Environmental Benefit Permit Strategy and proposed modifications to the SPDES Permit NY-000 1015.

This information is being concurrently submitted to the NRC pursuant to:

- Nine Mile Point Unit 1 letter dated April 15, 1983, which states that any changes of the SPDES Permit will be provided to the NRC.
- Nine Mile Point Unit 2 Environmental Protection Plan (Appendix B to Renewed Facility Operating License No. NPF-69), Section 3.2, requires that proposed changes of the SPDES Permit be reported to the NRC at the same time the change is submitted to the permitting agency.

There are no regulatory commitments contained in this letter.

Should you have any questions regarding the information in this submittal, please contact David Victome at (315) 349-1364.

Sincerely,

Shultz, Brandon K. Digitally signed by Shultz, Brandon K. Date: 2024.05.28 13:47:34 -04'00'

Brandon Shultz, Manager Site Regulatory Assurance, Nine Mile Point Nuclear Station

BKS/DSV

Attachment: Nine Mile Point Nuclear Station Response to NYSDEC Request for Information

Cool
IE25
NRR

cc: (without enclosures)
Regional Administrator, Region I, USNRC
NMP Project Manager, USNRC
NMP Senior Resident Inspector, USNRC

# Attachment 1

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# Nine Mile Point Nuclear Station Response to NYSDEC Request for Information

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Peter Orphanos
Site Vice President
Nine Mile Point
348 Lake Road
Oswego, NY 13126
(609) 709-6218
Peter.Orphanos@Constellation.com

Constellation

May 24, 2024

NMPE1334

Monica Moss, P.E.
NYSDEC Bureau of Water Permits
625 Broadway
Albany, New York 12233-3506

Nine Mile Point Nuclear Station, LLC
SPDES Permit Number NY-000 1015
DEC Number 7-3556-00013/00001

Subject: Re: Nine Mile Point Nuclear Station, NY0001015
**SPDES Permit Request for Information**

Dear Miss Moss,

In accordance with the State Pollution Discharge Elimination System (SPDES) Permit Number NY-000 1015 for Nine Mile Point Nuclear Station (NMPNS), attached are NMPNS responses to New York State Department of Environmental Conservation (NYSDEC) Request for Information (RFI) regarding the comprehensive review of the SPDES Permit under the Environmental Benefit Permit Strategy (EBPS). NMPNS responses including analytical data for intake and outfall samples, as well as the information from Discharge Monitoring Reports (DMR) for monitoring periods within the last four-and-a-half years, are enclosed herewith in Appendix A. NMPNS has summarized and provided references to applicable information that have previously been submitted to NYSDEC.

In addition to the response to the RFI, NMPNS respectfully requests the inclusion of the following modifications to the SPDES Permit NY-000 1015:

I. Considering the high quality of the Unit 2 Reverse Osmosis reject stream water that is currently discharged via Outfall 026 and then Outfall 040 to Lake Ontario, NMPNS requests to route the Reverse Osmosis reject stream to the Unit 2 intake. NMP will continue to monitor for each batched discharge at Outfall 026.

II. NMPNS investigations revealed that historical use of sulfuric acid water treatment chemical (WTC) was a contributing source of mercury (Hg) identified in Outfall 040 and has since switched to using a sulfuric acid WTC with lower mercury levels (0.1 ppm, compared to 2 ppm previously). Safety Data Sheets for the two sources of sulfuric acid are provided as Attachment 1 in Appendix 2.

May 24, 2024

III. NMPNS requests a language modification for Footnote #6 to apply on a calendar year basis, instead of the operating year basis. This will streamline annual reporting for the facility. Specific language is provided in Attachment 2 of Appendix 2.

IV. The current permit waives pH sampling and reporting at Outfall 001 – Unit 2 Storm Drain from November to March to avoid unsafe sampling conditions; further, NMPNS may adjust sampling dates if unsafe conditions exist outside of November to March. NMPNS requests this waiver apply to Storm Drain Outfall 020, in addition to Outfall 001.

If you have any questions, contact David Victomé at (315) 349-1364.

Sincerely,

Peter M Orphanos 5/22/24

Peter Orphanos
Site Vice President

PMO/DSV

cc: Emily Kosinski (NYSDEC, Albany)

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Attachments: **(1) Appendix A – NMPNS Responses to the NYSDEC RFI**
**(2) Appendix B – NMPNS Additional Permit Modification Requests**

# Appendix A

# NMPNS Responses to the NYSDEC RFI

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

Form NY-2C PART I SPDES

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

**New York State Department of Environmental Conservation**
**Application for SPDES Permit to Discharge Wastewater**
**GENERAL INFORMATION**

## SECTION 1. PERMIT ACTION REQUESTED

**Permit Action Requested**

1.1 **What is the reason for submitting this application?**

- ☐ A NEW proposed Discharge
- ☐ A RENEWAL of an existing permit
- ☐ An EXISTING discharge currently without permit
- ☑ An EBPS REQUEST FOR INFORMATION response
- ☐ A MODIFICATION of the existing permit (describe below)

1.2 **Increased Discharge Request**

Is this application a request for an increase in the quantity of water discharged from your facility to the waters of the State?

- ☐ Yes ➔ Describe the increase:
- ☑ No ➔ Skip to Item 2.1

## SECTION 2. PERMITTEE & FACILITY NAME, LEGAL STATUS, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

**Permittee & Facility Name, Legal Status, Mailing Address, and Location**

2.1 **Permittee Name**

Nine Mile Point Nuclear Station, LLC

2.2 **Permittee Mailing Address**

Street or P.O. box
348 Lake Road

| City or town | State | ZIP code |
|---|---|---|
| Oswego | NY | 13126 |

2.3 **Permitee Legal Status**

- ☐ Public—federal
- ☐ Public—state
- ☐ Other public (specify)_____
- ☑ Private
- ☐ Other (specify) _____

2.4 **Facility Name**

Nine Mile Point Nuclear Station

2.5 **NYSDEC Identification Number**

7-3556-00013/00001

2.6 **Facility Contact**

| Name (first and last) | Title | Phone number |
|---|---|---|
| David Victome | Environmental Specialist | (315) 349-1364 |

Email address
David.Victome@Constellation.com

2.7 **Facility Location**

Street, route number, or other specific identifier
348 Lake Road

| County name | County code (if known) | |
|---|---|---|
| Oswego | | |

| City or town | State | ZIP code |
|---|---|---|
| Oswego | NY | 13126 |

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

## SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

**SIC and NAICS Codes**

| 3.1 | SIC Code(s) | Description (optional) |
|---|---|---|
| | 4911 | Electric Services |
| | | |
| | | |
| | | |

| 3.2 | NAICS Code(s) | Description (optional) |
|---|---|---|
| | 221113 | Electric power generation, nuclear |
| | | |
| | | |
| | | |

## SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

**Operator Information**

4.1 **Name of Operator**

Nine Mile Point Nuclear Station, LLC

4.2 Is the name you listed in Item 4.1 also the owner?

☑ Yes → Skip to Item 5.1 ☐ No

4.3 **Operator Status**

☐ Public—federal ☐ Public—state ☐ Other public (specify)_____

☐ Private ☐ Other (specify) _____

4.4 **Phone Number of Operator**

**Operator Information Continued**

4.5 **Operator Address**

Street or P.O. Box

| City or town | State | ZIP code |
|---|---|---|
| | | |

Email address of operator

## SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

**Indian Land**

5.1 Is the facility located on Indian Land?

☐ Yes ☑ No

## SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

**Existing Environmental Permits**

6.1 **Existing Environmental Permits** (check all that apply and print or type the corresponding permit number for each)

| | | |
|---|---|---|
| ☑ SPDES NY0001015 | ☑ RCRA (hazardous wastes) NYD000730432 | ☐ UIC (underground injection) |
| ☐ PSD (air emissions) | ☐ Nonattainment program (CAA) | ☐ NESHAPs (CAA) |
| ☐ Ocean dumping (MPRSA) | ☐ Dredge or fill (CWA Section 404) | ☑ Other (specify) See Attachment 1 |

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

## SECTION 7. MAP (40 CFR 122.21(f)(7))

**Map**

7.1 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☑ Yes ☐ No See Attachment 2

## SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

**Nature of Business**

8.1 Describe the nature of your business.

The Nine Mile Point Nuclear Station (NMPNS) is located on the southeastern shore of Lake Ontario in Oswego, New York. NMPNS consists of two boiling water nuclear reactor units, which produce steam that turns turbines to generate electricity. The units withdraw cooling water from Lake Ontario.

See Attachment 3.

## SECTION 9. WATER SUPPLY & COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

**Water Supply Source(s)**

9.1 What water supply source(s) does your facility use? Identify the name or owner of each source. (check all that apply)

☑ Municipal ☑ Private Intake ☐ Private Well ☐ Other (specify)

Owner: Oswego, NY Lake Ontario

9.2 Provide the amount of water typically consumed from each of these sources.

| | | | | |
|---|---|---|---|---|
| Municipal | 65,065.00 | GPD | Private Well | MGD |
| Private Intake | 401.90 | MGD | Other | MGD |

9.3 Is the facility located within a sole source aquifer as shown on Exhibit 2C-6?

☐ Yes ➔Complete Application Supplement B (see SPDES website) ☑ No

**Cooling Water Intake Structures**

9.4 Does your facility use any of these water sources for cooling water?

☑ Yes ☐ No ➔SKIP to Item 10.1.

9.5 Identify the sources used for cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J and NYSDEC Commisioner's Policy 52 (CP-52) may have additional application requirements. Consult with NYSDEC to determine if additional information is needed.)

See Attachment 4

**Thermal Discharges**

9.6 If your industry group is listed (see instructions), or the temperature of your temperature by greater than 3°F, provide the following data in (°F):

Unit 1 in form entries; Unit 2 as follows:
Avg.T = 63.3, Max T = 87.3
Avg.DeltaT=11.9, Max DeltaT=19.4

| Avg. Temp. | Max Temp. | Avg. Delta T | Max Delta T |
|---|---|---|---|
| 83.40 | 110.80 | 29.40 | 36.20 |

## SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

**Variance Requests**

10.1 Do you intend to request or renew one or more variances pursuant to 6 NYCRR 702.17 or authorized at 40 CFR 122.21(m)? (Check all that apply). Consult with NYSDEC to determine what information is needed.

☐ Fundamentally different factors (CWA Section 301(n))
☐ Water quality related effluent limitations (CWA Section 302(b)(2))
☐ Non-conventional pollutants (CWA Section 301(c) and (g))
☑ Thermal discharges (CWA Section 316(a))
☐ NYS WQBEL (6 NYCRR 702.17)
☐ Not applicable

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

**SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))**

**Part I Checklist**

11.1 In Column 1 below, mark the sections of Form NY-2C Part I that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert NYSDEC. Note that not all applicants are required to provide attachments.

| Column 1 | Column 2 |
|---|---|
| ☑ Section 1: Permit Action Requested | ☐ w/ attachments |
| ☑ Section 2: Name, Mailing Address, and Location | ☐ w/ attachments |
| ☑ Section 3: SIC Codes | ☐ w/ attachments |
| ☑ Section 4: Operator Information | ☐ w/ attachments |
| ☑ Section 5: Indian Land | ☐ w/ attachments |
| ☑ Section 6: Existing Environmental Permits | ☑ w/ attachments |
| ☑ Section 7: Map | ☑ w/ topographic map ☐ w/ additional attachments |
| ☑ Section 8: Nature of Business | ☑ w/ attachments |
| ☑ Section 9: Water Supply & CWIS | ☑ w/ attachments ☐ w/ Sole Source Aquifer Supplement |
| ☑ Section 10: Variance Requests | ☐ w/ attachments |
| ☑ Section 11: Checklist | ☐ w/ attachments |

# PART II of Form NY-2C begins on the next page.

ATTACHMENT 1

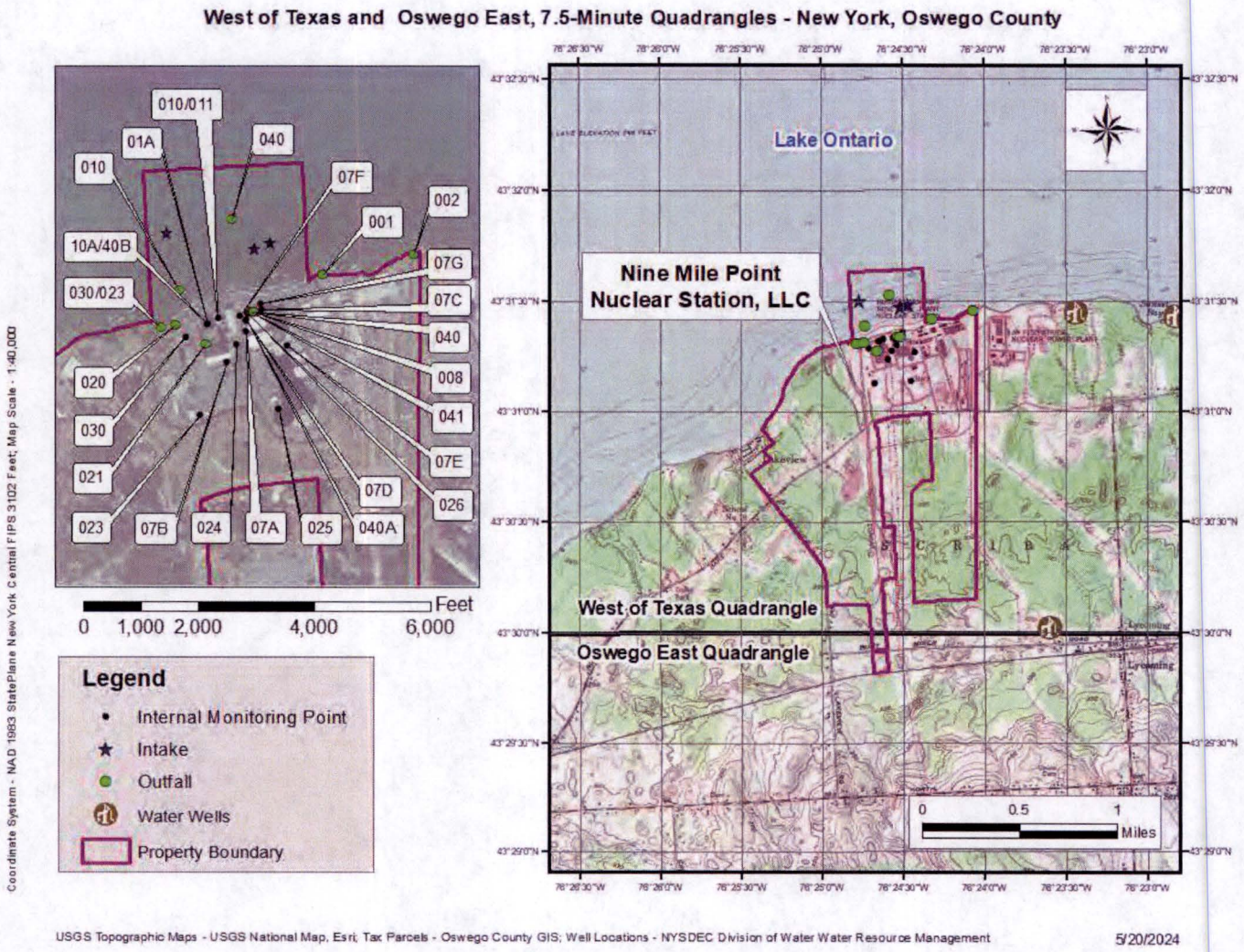
SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

| Issuing Agency | Permit Type | Permit Number |
|---|---|---|
| NYSDEC | SPDES | NY0001015 |
| NYSDEC | RCRA (Hazardous wastes) | NYD000730432 |
| NYSDEC | Fish and Wildlife License | 523 |
| NYSDEC | Pesticide | 79634 |
| NYSDEC | Hazardous Material Bulk Storage[1] | 7-000058 |
| NYSDEC | Petroleum Material Bulk Storage | 7-429880 |
| NYSDEC | Water Withdrawal | 7-3556-00013/00033, WWA No. 11,749 |
| NYSDEC | Beaver Damage Permit | 35283 |
| NYSDEC | Excavation & Fill in Navigable Waters | 7-3556-00013/00034 |
| NYSDEC | Water Quality Certification | 7-3556-00013/00035 |
| USFWS | Permit for Bird Salvage and Transport | N/A |
| USDOT | Registration (Transport of Hazardous Material) | 051022550113EG |
| State of Tennessee | Radioactive Shipment License | T-NY002-L06 |
| SC Department of Health and Environmental Control | SC Radioactive Waste Transport Unit #1 | 0004-31-06-X |
| SC Department of Health and Environmental Control | SC Radioactive Waste Transport Unit #2 | 0408-31-06-X |
| Virginia Department of Emergency Management | Registration (Transport of Hazardous Material) | CE-43006 |
| | | |

[1] exempted on 9/22/2016
NYSDEC = New York State Department of Environmental Conservation
USFWS = United States Fish and Wildlife Service
USDOT = United States Department of Transportation

ATTACHMENT 2

SECTION 7. MAP (40 CFR 122.21(f)(7))




**Topographic Map of the Facility**

ATTACHMENT 3
FORM NY-2C, PART I

SECTION 8. NATURE OF BUSINESS
(40 CFR 122.21(f)(8))

**8.1 Describe the nature of your business**

The Nine Mile Point Nuclear Station (NMPNS) is located on the southeastern shore of Lake Ontario in Oswego, New York. NMPNS consists of two boiling water nuclear reactor units, which produce steam that turns turbines to generate electricity.

The units withdraw cooling water from Lake Ontario. Cooling water systems for each unit include a circulating water system (CWS) and a service water system (SWS). For each unit, the CWS circulates cooling water through the main condenser to condense steam after it passes through the turbine. Each unit's SWS circulates cooling water through heat exchangers that service various plant components. Both the CWS and SWS for Unit 1 are once-through systems. The SWS for Unit 2 is also a once-though system. However, the Unit 2 CWS is a closed-cycle system that uses a cooling tower. Some of the discharge from the SWS is added to the CWS to make up for losses due to evaporation from the cooling tower and CWS blow down.

Units 1 and 2 have separate intake and discharge structures located offshore in Lake Ontario. Onshore, each Unit has a separate screenwell and pumphouse structure.

ATTACHMENT 4
FORM NY-2C, PART I

SECTION 9. WATER SUPPLY & COOLING WATER INTAKE STRUCTURES
(40 CFR 122.21(f)(9))

**9.5 Identify the sources used for cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J and NYSDEC Commissioner's Policy 52 (CP-52) may have additional application requirements. Consult with NYSDEC to determine if additional information is needed.)**

Nine Mile Point Unit 1 uses an offshore velocity cap intake (nominally 1,100 feet from the facility) to withdraw cooling water from Lake Ontario and Nine Mile Point Unit 2 has two offshore velocity cap intakes (nominally 1,325 feet and 1,240 feet from the facility for the west and east intakes, respectively) in Lake Ontario.

Pursuant to prior requirements in the SPDES permit, the facility has submitted the following reports to comply with Clean Water Act (CWA) §316(b) and CP-52. As NYSDEC begins to make a Best Technology Available (BTA) determination consistent with CWA §316(b) and CP-52, Nine Mile Point can be available to respond to any questions or provide updated information regarding Nine Mile Point's intake structures.


CENG. 2010. Design and Construction Technology Plan (DCTR). Letter dated June 1, 2020.

EA Engineering, Science, and Technology, Inc. (EA). 2009. Impingement and Entrainment Summary Report for Nine Mile Point Nuclear Station Unit 1, 2006-2007 Studies. Prepared for Constellation Generation Group. October

EA. 2010. Comprehensive Assessment of Impingement Mortality and Entrainment to Support Determination of Best Technology Available under the Clean Water Act Section 316(b) for the Nine Mile Point Nuclear Station Units 1 And 2. Prepared for Constellation Generation Group. May 2010.

AECOM. 2018. Closed-Cycle Recirculating System Design and Construction Technology Review. Nine Mile Point Nuclear Station, Scriba, New York. April 5, 2018

ENERCON. 2020. CWA 316(b) Technical Response Support to New York State Department of Environmental Conservatism (NYSDEC) Questions for the Nine Mile Point Unit 1 Nuclear Station. Report No. EXLN72-REPT-002.

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

**Form NY-2C PART II SPDES**

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

**New York State Department of Environmental Conservation Application for SPDES Permit to Discharge Wastewater**

**NEW AND EXISTING INDUSTRIAL OPERATIONS DETAILED INFORMATION**

## SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1)) & RECEIVING WATER DESCRIPTION (6 NYCRR 750-1.7(a))

**Outfall Location & Receiving Water Description**

1.1 Provide information on each of the facility's outfalls and the receiving waters in the table below.

See Attachment 5

| | Outfall 001 (OF) | Outfall 01A (IMP) | Outfall 002 (OF) |
|---|---|---|---|
| Latitude | 43 ° 31 ′ 25.0 ″ N | 42 ° 31 ′ 18.0 ″ N | 43 ° 31 ′ 19.7 ″ N |
| Longitude | 76 ° 24 ′ 19.2 ″ W | 76 ° 24 ′ 38.7 ″ W | 76 ° 24 ′ 36.8 ″ W |
| Receiving Water Name | Lake Ontario | Lake Ontario via Outfall 001 | Lake Ontario |
| Water Index Number (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |
| **Groundwater Discharges Only:** | | | |
| Soil Type | | | |
| Depth to Water Table | ft | ft | ft |

## SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))

**Line Drawing**

2.1 Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C–3 at end of instructions for example.)

☑ Yes ☐ No

## SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

**Average Flows and Treatment**

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

****Outfall Number**** _____

**Operations Contributing to Flow**

| Operation | Average Flow | Maximum Flow |
|---|---|---|
| See Attachment 7 | MGD | MGD |
| | MGD | MGD |
| | MGD | MGD |
| | MGD | MGD |

**Treatment Units**

| Description (include size, flow rate through each treatment unit, retention time, etc.) | Code from Table 2C-1 | Final Disposal of Solid or Liquid Wastes Other Than by Discharge |
|---|---|---|
| See Attachment 7 | | |
| | | |
| | | |
| | | |

**Average Flows and Treatment Continued**

3.1 cont.

****Outfall Number**** _____

**Operations Contributing to Flow**

| Operation | Average Flow | Maximum Flow |
|---|---|---|
| See Attachment 7 | MGD | MGD |
| | MGD | MGD |
| | MGD | MGD |
| | MGD | MGD |

**Treatment Units**

| Description (include size, flow rate through each treatment unit, retention time, etc.) | Code from Table 2C-1 | Final Disposal of Solid or Liquid Wastes Other Than by Discharge |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

****Outfall Number**** _____

**Operations Contributing to Flow**

| Operation | Average Flow | Maximum Flow |
|---|---|---|
| | MGD | MGD |
| | MGD | MGD |
| | MGD | MGD |
| | MGD | MGD |

**Treatment Units**

| Description (include size, flow rate through each treatment unit, retention time, etc.) | Code from Table 2C-1 | Final Disposal of Solid or Liquid Wastes Other Than by Discharge |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**WTCs**

3.2 ~~Does the facility utilize or plan to utilize any water treatment chemicals that can potentially be discharged from one or more outfalls?~~

☑ Yes → Complete Table F ☐ No → SKIP to Item 3.3.

**Mixing Zone Form**

3.3 Has a Mixing Zone Analysis Form been completed and attached? All applicants must complete at least the Simple Form for each wastewater outfall to surface waters. Indicate which form was completed and is attached to this application.

☑ Yes → Simple Form ☐ Yes → Detailed Form

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

## SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

**Intermittent Flows**

4.1 Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal?

☑ Yes ☐ No → SKIP to Section 5.

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

| Outfall Number | Operation (list) | Frequency | | Flow Rate | | Duration |
|---|---|---|---|---|---|---|
| | | Average Days/Week | Average Months/Year | Long-Term Average | Maximum Daily | |
| | See | days/week | months/year | MGD | MGD | days |
| | Attachment 8 | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |
| | | days/week | months/year | MGD | MGD | days |

## SECTION 5. PRODUCTION (40 CFR 122.21(g)(5))

**Applicable ELGs**

5.1 Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility?

☑ Yes ☐ No → SKIP to Item 5.5.

5.2 Provide the following information on applicable ELGs.

| ELG Category | ELG Subcategory | Regulatory Citation |
|---|---|---|
| Steam Electric Power Generating | | 40 CFR 423 |
| | | |
| | | |

**Production-Based Limitations**

5.3 Are any of the applicable ELGs expressed in terms of production (or other measure of operation)?

☐ Yes ☑ No → SKIP to Item 5.5.

5.4 Provide an actual measure of daily production expressed in terms and units of applicable ELGs.

| Outfall Number | Operation, Product, or Material | Quantity per Day | Unit of Measure |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

**Specific Industry**

5.5 Is your industry type listed as a specific industry requiring submission of a supplemental application form (see instructions)?

☑ Yes, supplemental form attached ☐ No → SKIP to Section 6.

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

## SECTION 6. SCHEDULED IMPROVEMENTS (40 CFR 122.21(g)(6))

**Upgrades and Improvements**

6.1 Are you presently voluntarily improving or required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

| Brief Identification and Description of Project | Affected Outfalls (list outfall number) | Source(s) of Discharge | Final Compliance Dates | |
|---|---|---|---|---|
| | | | Required | Projected |
| | | | | |
| | | | | |
| | | | | |

6.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? *(optional item)*

☐ Yes ☑ No ☐ Not applicable

## SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(g)(7))

**Effluent and Intake Characteristics**

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

**Table A. Conventional and Non-Conventional Pollutants**

7.1 Are you requesting a waiver from NYSDEC for one or more of the Table A pollutants for any of your outfalls?

☑ Yes ☐ No ➔ SKIP to Item 7.3.

7.2 If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application.

Outfall Number 002 Outfall Number 008 Current SPDES Permit does not require monitoring per at 002 & 008 See Attachment 10

7.3 Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?

☑ Yes ☐ No;a waiver request has been attached for all pollutants at all outfalls.

**Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants**

7.4 Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-5?

☑ Yes ☐ No ➔SKIP to Item 7.8.

7.5 Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?

☑ Yes ☐ No

7.6 List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-5.

| Primary Industry Category | Required GC/MS Fraction(s) (Check applicable boxes.) | | | |
|---|---|---|---|---|
| Steam electric power plants | ☑ Volatile | ☑ Acid | ☐ Base/Neutral | ☐ Pesticide |
| | ☐ Volatile | ☐ Acid | ☐ Base/Neutral | ☐ Pesticide |
| | ☐ Volatile | ☐ Acid | ☐ Base/Neutral | ☐ Pesticide |

**Effluent and Intake Characteristics Continued**

| | |
|---|---|
| 7.7 | Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6?<br>☐ Yes ☑ No |
| 7.8 | Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required?<br>☑ Yes ☐ No |
| 7.9 | Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge?<br>☑ Yes ☐ No |
| 7.10 | Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge?<br>☑ Yes ☐ No |
| **Table C. Certain Conventional and Non-Conventional Pollutants** | |
| 7.11 | Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls?<br>☑ Yes ☐ No |
| 7.12 | Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"?<br>☑ Yes ☐ No |
| **Table D. Certain Hazardous Substances and Asbestos** | |
| 7.13 | Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls?<br>☑ Yes ☐ No |
| 7.14 | Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available?<br>☑ Yes ☐ No |
| **Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)** | |
| 7.15 | Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent?<br>☐ Yes ➔ Complete Table E. ☑ No ➔ SKIP to Section 8. |
| 7.16 | Have you completed Table E by reporting *qualitative* data for TCDD?<br>☑ Yes ☐ No |

## SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(g)(9))

**Used or Manufactured Toxics**

| | | | |
|---|---|---|---|
| 8.1 | Are any other pollutants, substances, or components of substances, not already listed in Tables A-E, used or manufactured at your facility as an intermediate or final product or byproduct?<br>☐ Yes ☑ No ➔ SKIP to Section 9. | | |
| 8.2 | List the pollutants below. | | |
| | 1. | 4. | 7. |
| | 2. | 5. | 8. |
| | 3. | 6. | 9. |

## SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(g)(11))

**Biological Toxicity Tests**

9.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) on a receiving water in relation to your discharge?

☑ Yes ☐ No ➔ SKIP to Section 10.

9.2 Identify the tests and their purposes below.

| Test(s) | Purpose of Test(s) | Submitted to NYSDEC? | Date Submitted |
|---|---|---|---|
| WET at Outfall 040 Invertebrate (C. dubia) | Acute & Chronic Toxicity to Purate Chlorite | ☑ Yes ☐ No | 5/4/2023 tests completed |
| | | ☐ Yes ☐ No | |
| | | ☐ Yes ☐ No | |

## SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))

**Contract Analyses**

10.1 Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm?

☑ Yes ☐ No ➔ SKIP to Section 11.

10.2 Provide information for each contract laboratory or consulting firm below.

| | Laboratory Number 1 | Laboratory Number 2 | Laboratory Number 3 |
|---|---|---|---|
| Name of laboratory/firm | Adirondack Environmental Services | York Analytical Laboratories | Life Science Laboratories, Inc. |
| ELAP Cert No. | 10709 | 12058 | 10248 |
| Laboratory address | 314 North Pearl St Albany, NY 12207 | 132-02 89th AVENUE RICHMOND HILL, NY 11418 | 5854 Butternut Drive East Syracuse, NY 13057 |
| Phone number | (518) 434-4546 | (203) 325-1371 | (315) 445-1105 |
| Pollutant(s) analyzed | Remaining pollutants | EPA 1633 analysis for PFAS suite | Tables: A-C |

## SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))

**Additional Information**

11.1 Does your facility use, produce, store, distribute, or otherwise dispose of any significant quantity of substances listed in Tables B, C, D, E or those substances identified in Item 8.2?

☑ Yes ➔ Complete Table G. ☐ No ➔ SKIP to Item 11.2.

11.2 Does your facility utilize pumping stations to convey wastewaters on the site and/or in wastewater treatment?

☑ Yes ➔ Complete Table H. ☐ No ➔ SKIP to Item 11.3.

11.3 Has NYSDEC requested additional information?

☑ Yes ☐ No ➔ SKIP to Section 12.

11.4 List the information requested and attach it to this application.

1. Simple Mixing Zone Form
2. Consideration of Future Physical Climate Risk
3. No Exposure Certification Form
4. Supplement O Form

| DEC Identification Number | SPDES Permit Number | Facility Name | Form Approved: 5/12/2023 |
|---|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station | |

## SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

**Checklist and Certification Statement**

12.1 In Column 1 below, mark the sections of Form NY-2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert NYSDEC. Note that not all applicants are required to complete all sections or provide attachments.

| Column 1 | Column 2 |
|---|---|
| ☑ Section 1: Outfall Location | ☑ w/ attachments |
| ☑ Section 2: Line Drawing | ☑ w/ line drawing ☐ w/ additional attachments |
| ☑ Section 3: Average Flows and Treatment | ☑ w/ attachments ☑ w/ Simple MZ Form<br>☑ w/ Table F ☐ w/ Detailed MZ Form |
| ☑ Section 4: Intermittent Flows | ☑ w/ attachments |
| ☑ Section 5: Production | ☐ w/ attachments |
| ☑ Section 6: Improvements | ☐ w/ attachments ☐ w/ optional additional sheets describing any additional pollution control plans |
| ☑ Section 7: Effluent and Intake Characteristics | ☐ w/ request for a waiver and supporting information ☐ w/ explanation for identical outfalls<br>☑ w/ primary industry supplemental form ☐ w/ additional attachments<br>☑ w/ Table A ☑ w/ Table B<br>☑ w/ Table C ☑ w/ Table D<br>☑ w/ Table E ☑ w/ analytical results as an attachment |
| ☑ Section 8: Used or Manufactured Toxics | ☐ w/ attachments |
| ☑ Section 9: Biological Toxicity Tests | ☐ w/ attachments |
| ☑ Section 10: Contract Analyses | ☐ w/ attachments |
| ☑ Section 11: Additional Information | ☑ w/ attachments ☑ w/ Table G ☑ w/ Table H |
| ☑ Section 12: Checklist and Certification Statement | ☐ w/ attachments |

12.2 **Certification Statement**

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

| Name (print or type first and last name) | Official title |
|---|---|
| Peter Orphanos | Site Vice President |
| **Signature** Peter M Orphanos | **Date signed** 5/22/2024 |

ATTACHMENT 5 (PAGE 1 of 3)

FORM NY-2C, PART II
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1)) &
RECEIVING WATER DESCRIPTION (6 NYCRR 750-1.7(a))
(Continued)

1.1 Provide information on each of the facility's outfalls and the receiving waters in table below

**OF = Outfall; IMP = Internal Monitoring Point; EOP = End of Pipe**

| | **IMP** 07A | **IMP** 07B | **IMP** 07C |
|---|---|---|---|
| Latitude | 43° 31' 18.0" N | 43° 31' 14.2" N | 43° 31' 20.7" N |
| Longitude | 76° 24' 32.2" W | 76° 24' 35.3" W | 76° 24' 29.6" W |
| Receiving Water Name | Lake Ontario via Outfall 001 | Lake Ontario via Outfall 020 | Lake Ontario via Outfall 001 |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

| | **IMP** 07D | **IMP** 07E | **IMP** 07F |
|---|---|---|---|
| Latitude | 43° 31' 19.4" N | 43° 31' 16.2" N | 43° 31' 20.0" N |
| Longitude | 76° 24' 32.1" W | 76° 24' 25.1" W | 76° 24' 33.2" W |
| Receiving Water Name | Lake Ontario via Outfall 001 | Lake Ontario via Outfall 001 | Lake Ontario via Outfall 001 |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

| | **IMP** 07G | **OF** 008 | **OF** 010 |
|---|---|---|---|
| Latitude | 43° 31' 21.5" N | 43° 31' 20.4" N | 43° 31' 23.1" N |
| Longitude | 76° 24' 29.8" W | 76° 24' 30.9" W | 76° 24' 43.6" W |
| Receiving Water Name | Lake Ontario via Outfall 001 | Lake Ontario | Lake Ontario |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

ATTACHMENT 5 (PAGE 2 of 3)

FORM NY-2C, PART II
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1)) &
RECEIVING WATER DESCRIPTION (6 NYCRR 750-1.7(a))
(Continued)

1.1 Provide information on each of the facility's outfalls and the receiving waters in table below

**OF = Outfall; IMP = Internal Monitoring Point**

| | **IMP** 10A | **IMP** 011 | **OF** 020 |
|---|---|---|---|
| Latitude | 43° 31' 18.9" N | 43° 31' 19.7" N | 43° 31' 18.7" N |
| Longitude | 76° 24' 38.7" W | 76° 24' 36.9" W | 76° 24' 44.3" W |
| Receiving Water Name | Lake Ontario | Lake Ontario | Lake Ontario |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

| | **OF** 021 | **IMP** 023 | **IMP** 024 |
|---|---|---|---|
| Latitude | 43° 31' 16.3" N | 43° 31' 7.5" N | 43° 31' 16.4" N |
| Longitude | 76° 24' 39.1" W | 76° 24' 39.9" W | 76° 24' 33.7" W |
| Receiving Water Name | Lake Ontario | Ditch (U1SW), then to Lake Ontario | Lake Ontario via Outfall 020 |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

| | **IMP** 025 | **IMP** 026 | **IMP** 030 |
|---|---|---|---|
| Latitude | 43° 31' 8.4" N | 43° 31' 20.2" N | 43° 31' 17.2" N |
| Longitude | 76° 24' 26.6" W | 76° 24' 31.9" W | 76° 24' 42.5" W |
| Receiving Water Name | Ditch (U1SW), then to Lake Ontario | Lake Ontario via Outfall 030 | Ditch (U1SW), then to Lake Ontario |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

ATTACHMENT 5 (PAGE 3 of 3)

FORM NY-2C, PART II
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1)) &
RECEIVING WATER DESCRIPTION (6 NYCRR 750-1.7(a))

1.1 Provide information on each of the facility's outfalls and the receiving waters in table below

**OF = Outfall; IMP = Internal Monitoring Point**

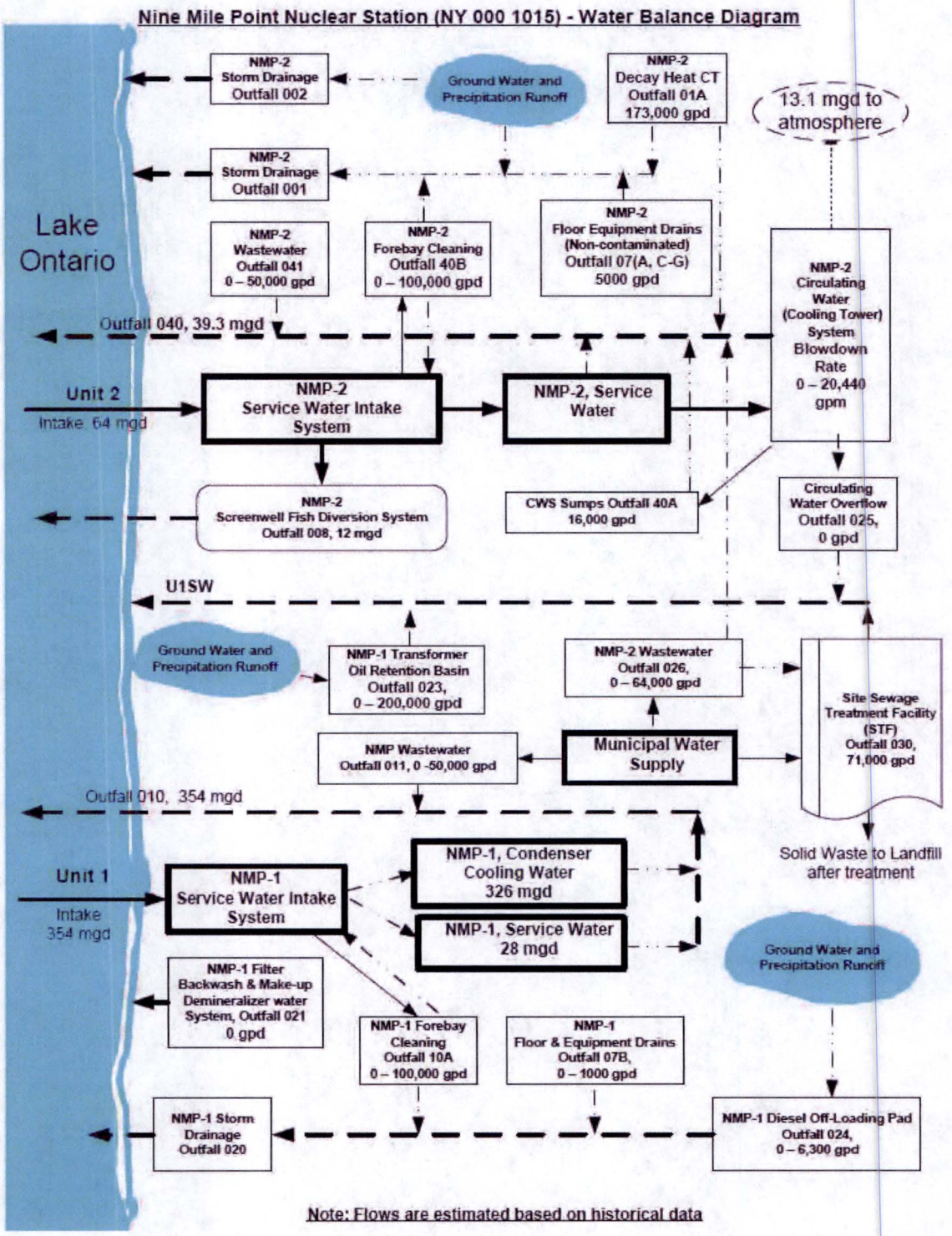
| | **OF** 030/023 | **IMP** 040 | **OF** 040 |
|---|---|---|---|
| Latitude | 43° 31' 18.5" N | 43° 31' 20.3" N | 43° 31' 31.8" N |
| Longitude | 76° 24' 46.8" W | 76° 24' 31.4" W | 76° 24' 34.6" W |
| Receiving Water Name | Lake Ontario | Lake Ontario | Lake Ontario |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

| | **IMP** 40A | **IMP** 40B | **IMP** 041 |
|---|---|---|---|
| Latitude | 43° 31' 19.5" N | 43° 31' 18.9" N | 43° 31' 20.3" N |
| Longitude | 76° 24' 32.2" W | 76° 24' 38.7" W | 76° 24' 31.4" W |
| Receiving Water Name | Lake Ontario via Outfall 040 | Lake Ontario via Outfalls 001 or 040 | Lake Ontario via Outfall 040 |
| Water Index Name (WIN) | Ont (portion 11) | Ont (portion 11) | Ont (portion 11) |
| Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment | 0302-0041 | 0302-0041 | 0302-0041 |
| Water Classification | A | A | A |

| DEC Identification Number | SPDES Permit Number | Facility Name |
|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station |

ATTACHMENT 6 (PAGE 1 of 2)

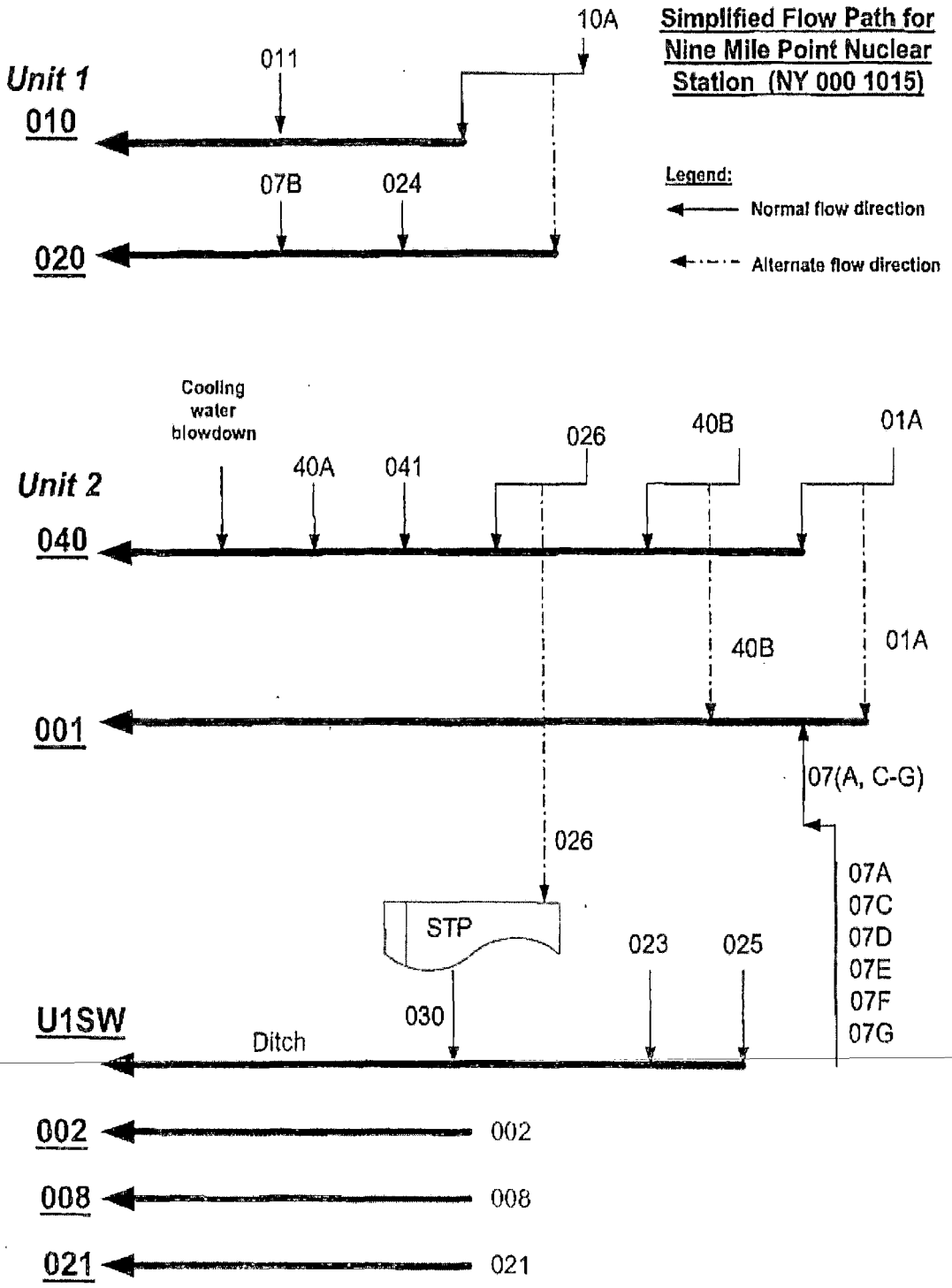
FORM NY-2C, PART II
SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))
(Continued)



| DEC Identification Number | SPDES Permit Number | Facility Name |
|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station |

ATTACHMENT 6 (PAGE 2 of 2)

FORM NY-2C, PART II
SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))



ATTACHMENT 7

FORM NY-2C, PART II
SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

| **Outfall Number** 030 | | |
|---|---|---|
| **Operations Contributing to Flow** | | |
| **Operation** | **Average Flow** | **Maximum Flow** |
| Kitchen, cafeteria, bathrooms | 0.04 MGD | 0.11 MGD |
| | | |
| | | |
| | | |
| **Treatment Units** | | |
| **Description** (include size, flow rate through each treatment unit, retention time, etc.) | **Code from Table 2C-1** | **Final Disposal of Solid or Liquid Wastes Other Than by Discharge** |
| Equalization | | |
| Grit removal | 1-M | |
| Aeration + Activated sludge | 1-O + 3-A | |
| Clarification | 1-U | |
| Disinfection | 2-F | |
| Dechlorination | 2-E | |
| Neutralization | 2-K | |
| Drying beds | 5-H | Landfill |

Note: There is no treatment needed or provided prior to discharge from other outfalls, except for pH neutralization as-needed.

| DEC Identification Number | SPDES Permit Number | Facility Name |
|---|---|---|
| 7-3556-00013/00001 | NY0001015 | Nine Mile Point Nuclear Station |

ATTACHMENT 8

FORM NY-2C, PART II

SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

| Outfall Number | Operation | Frequency | | Flow Rate | | Duration[1] |
|---|---|---|---|---|---|---|
| | | Average Days/Week | Average Months/Year | Long-Term Average | Maximum Daily | |
| 07A | Summer Seasonal Discharge Unit 2 Floor & Equipment Drains | | 4 | 1096 GPD | 3000 GPD | 120 days |
| 07B | Summer Seasonal Discharge Unit 1 Floor & Equipment Drains | | 3 | 933 GPD | 1000 GPD | 90 days |
| 10A | Unit #1 Forebay Cleaning Basins (IMP) | | 0.2 | 250,576 GPD | 434,228 GPD | 6-7 days |
| 023 | Unit #1 Oil Spill Retention Basin, Batch Discharge[2] | | 0.1 | 55,000 GPD | 87,100 GPD | 1 day (Batch) |
| 024 | Unit #1 Diesel Off Loading Pad Drainage (IMP), Batch Discharge[2] | | 0.05 | 8000 GPD | 8700 GPD | 1 day (Batch) |
| 026 | Unit #2 Resin Regeneration, Demineralized Test Water, and Reverse Osmosis Wastewater[2] | 2 | 12 | 31,524 GPD | 63,047 GPD | 1 day (Batch) |
| 40B | Unit #2 Forebay Cleaning Basins (IMP), periodic cleaning | | 1-2 | 110,048 GPD | 262,496 GPD | 3-5 days |

[1] Duration is best average estimate

[2] Batch discharges only

No discharges were performed at Outfalls; 01A, 07F, 07G, 011, 021, 025, and 041 during the required monitoring period for this submittal.

## TABLE F. WATER TREATMENT CHEMICAL LISTING

| WTC Trade Name | Manufacturer | WTC Function | Authorized Dosage (lbs/d) | | Discharge Outfall | Authorized Date | New or Increase Request (optional) |
|---|---|---|---|---|---|---|---|
| | | | Average | Maximum | | | |
| For all New or Increased WTCs, you must attach a completed WTC Request Form. ☐ No new or increased WTC requests included as part of this application. | | | | | | | |
| **See Attachment 9** | | | | | | | ☐New ☐Increase |
| | | | | | | | ☐New ☐Increase |
| | | | | | | | ☐New ☐Increase |
| | | | | | | | ☐New ☐Increase |
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| | | | | | | | ☐New ☐Increase |
| | | | | | | | ☐New ☐Increase |

## TABLE G. INDUSTRIAL CHEMICAL SURVEY

Complete this table for all substances that have been used, produced, stored, distributed or otherwise disposed of in significant quantity AND for any quantity of BCCs, chemicals for which FDA fish flesh limits exist, or restricted pesticide products listed in Part 326, Section 2 of the ECL. Restricted pesticides also include those products whose labeling bears the statement "Restricted Use Pesticide." Do not include chemicals that are present as *de minimus* concentrations as listed in the SDS for that substance.

For any substance listed that is used in a manner which could cause them to come into contact with a wastewater that is ultimately discharged to the waters of the State through an outfall controlled by this permit application, identify it as "Present" and the Outfall(s) by which it may be discharged. Sampling results for these pollutants should also be included with Tables B-E.

☐ A separate, but equivalent table has been attached as part of this application.

| Substance Name | CAS Number | Purpose of Use Code | Average Annual Usage | | Amount On Hand | Presence in Discharge | Discharge Outfall |
|---|---|---|---|---|---|---|---|
| EVAC | 66330-88-9 | WTC - Water Treatment | 5,100 | Lbs | Lbs | ☑ Present ☐ Not Present | 010 |
| Sodium Bisulfite | 7631-90-5 | WTC - Water Treatment | 70,300 | Lbs | Gal | ☑ Present ☐ Not Present | 010 |
| Super Chlor | 7778-54-3 | WTC - Water Treatment | 87,900 | Lbs | Gal | ☑ Present ☐ Not Present | 010 |
| 3D TRASAR 3DT121 | | WTC - Water Treatment | 175,500 | Lbs | Gal | ☑ Present ☐ Not Present | 010 |
| EVAC | 66330-88-9 | WTC - Water Treatment | 6,300 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| LiquiBrom 4000 | 7647-15-6 | WTC - Water Treatment | 19,200 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| SURE-COOL 1393 | 2809-21-4 | WTC - Water Treatment | 6,000 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| Super Chlor | 7778-54-3 | WTC - Water Treatment | 387,500 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| ControlBrom CB70 | 7647-15-6 | WTC - Water Treatment | 56,600 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| Sulfuric Acid | 7664-93-9 | WTC - Water Treatment | 630,000 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| Sodium Bisulfite | 7631-90-5 | WTC - Water Treatment | 29,300 | Lbs | Gal | ☑ Present ☐ Not Present | 040 |
| 3D TRASAR 3DT121 | | WTC - Water Treatment | 20,700 | Lbs | Gal | ☐ Present ☐ Not Present | 040 |
| | | | | | Gal | ☐ Present ☐ Not Present | |
| | | | | | Gal | ☐ Present ☐ Not Present | |

## TABLE H. FACILITY & COLLECTION SYSTEM RESILIENCY

| Pump Station Name | PS Owner | General Location | Latitude (DMS) | Longitude (DMS) | Floor Elevation (ft, NAVD88) |
|---|---|---|---|---|---|
| Complete this table for all pump stations that exist at the wastewater treatment facility and within the collection system. Identify the name of the pump station, the owner of the pump station (if different than the SPDES permittee), the general location of the pump station (e.g. intersection of Green St. & Water St.), the latitude and longitude of the pump station in degrees-minutes-seconds (DMS) format, and the elevation in feet of the pump station floor (per the NAVD88 datum). | | | | | |
| ☐ The wastewater treatment facility and collection system do not contain any pump stations. | | | | | |
| Cafeteria | | Cafeteria - Outdoors, West c | 43 ° 31 ' 16.6( " | 76 ° 24 ' 32.8; " | 260.30 |
| L-Shaped Building | | rn Quadrant of L-Shaped Bui | 43 ° 31 ' 16.5' " | 76 ° 24 ' 20.1( " | 260.30 |
| Nuclear Learning Center | | Nuclear Learning Center- Ins | 43 ° 31 ' 13.5' " | 76 ° 25 ' 1.37 " | 260.30 |
| Operations Building | | lain Level of OPS Building, So | 43 ° 31 ' 13.3( " | 76 ° 24 ' 23.2( " | 250.00 |
| | | | ° ' " | ° ' " | |
| | | | ° ' " | ° ' " | |
| | | | ° ' " | ° ' " | |
| | | | ° ' " | ° ' " | |
| | | | ° ' " | ° ' " | |
| | | | ° ' " | ° ' " | |

ATTACHMENT 9

TABLE F. WATER TREATMENT CHEMICAL LISTING

| Affected Outfall(s) | Dosage (lbs/day) | | WTC Manufacturer and Product Name | WTC Function | Approval Date |
|---|---|---|---|---|---|
| | Average | Max | | | |
| 10 | 1,180.0 | 1,262.0 | Nalco Company - Nalco 73551 | Dispersant and Detergent | 28-May-10 |
| | 1,187.0 | 2,690.0 | Nalco Company EVAC | Microrganism control chemical at Unit 1 condenser cooling water | 28-Apr-10 |
| | 681.0 | 2,033.0 | Slack Company - Sodium Hypochlorite (Superchlor) | Chlorination at Unit 1 circulating water | 28-May-10 |
| | 681.0 | 2,033.0 | Surpass Chemical Company Inc. | Chlorination at Unit 1 Circulating Water (CWS) | 15-Jul-22 |
| | 420.0 | 1,395.0 | Slack Company - Sodium Bisulfite Solution | Water Treatment (reduce hypobromite and hypochlorite to its salt prior to dicharge to Outfall) | 28-May-10 |
| | 1,859.0 | 2,030.0 | Nalco Company - 3DT121 | Cooling Water Dispersant | 28-May-10 |
| | 500.0 | 1,000.0 | Sani-Chips (Wood Flour) | Condenser Maintenance | 16-Mar-18 |
| | 79.8 | 238.0 | Nalco Company - Acti-Brom 1338 | Biodisperant at Unit 1 condenser | 28-May-10 |
| 10A | 121.2 | 254.5 | Hild & Associates - Bio-Star (2% solution) | Flocculent for Forebay Cleaning at Unit 1 | 22-Jan-21 |
| 23 | | 20.2 | | pH control at Unit 1 oil spill retention basin | |
| 26 | 2.5 | 4.9 | Slack Company - Caustic 25% | RO Membrian cleaning | 4-Aug-17 |
| | 1.9 | 3.7 | Slack Company - Sodium Busulfire Solution | Dechlorination at Unit 2 RO Unit | 4-Aug-17 |
| | 1.9 | 3.7 | SUEZ WTS USA - HYPERSPERSE MDC 150 | Reverse Osmosis Antiscalent | 4-Aug-17 |
| 40 | 1,983.0 | 3,363.0 | Nalco Company EVAC | Microrganism control chemical at Unit 1 condenser cooling water | 16-May-23 |
| | 6,000.0 | 11,000.0 | PVC Chemical Company - Sulfuric Acid | pH control at Unit 2 Cooling Tower (CWS) | 29-Apr-10 |
| | 1,097.0 | 3,290.0 | Slack Company - Sodium Hypochlorite (Superchlor) | Chlorination at Unit 2 Cooling Tower (CWS) | 7-May-10 |
| | 449.0 | 630.0 | Surpass Chemical Company Inc. | Chlorination at Unit 2 Service Water (SWP) | 15-Jul-22 |
| | 446.0 | 630.0 | Surpass Chemical Company Inc. | Chlorination at Unit 2 Cooling Tower (CWS) | 15-Jul-22 |
| | 339.0 | 630.0 | Slack Company - Sodium Hypochlorite (Superchlor) | Chlorination at Unit 2 Service Water (SWP) | 30-May-08 |
| | 400.0 | 1,200.0 | Sani-Chips (Wood Flour) | Condenser Maintenance | 16-Mar-18 |
| | 215.0 | 394.0 | BIO-LAB, Inc - LiquiBrom 4000 | Chlorine enhancer at Unit 2 Cooling Tower (SWP) | 3-Nov-21 |
| | 165.0 | 247.5 | Nalco Company - ControlBrom CB70 | Chlorine enhancer at Unit 2 Cooling Tower (CWS) | 7-May-10 |
| | 209.5 | 493.8 | Nalco Company - ControlBrom CB70 | Chlorine enhancer at Unit 2 Cooling Tower (CWS) | 24-Jun-16 |
| | 360.7 | 901.0 | Nalco Company - 3DT121 | Cooling Water Dispersant/Scale Inhibitor(CWS) | 7-May-10 |
| | 108.2 | 270.3 | Nalco Company - SURE-COOL 1393 | Scale Inhibitor at Unit 2 (CWS) | 3-Sep-10 |
| | 264.0 | 317.0 | Nalco 73551 | Dispersant and Detergent | 3-Nov-21 |
| | 24.0 | 95.0 | GE Water & Process Technologies - Control IS3010 | Dechlorination at Unit 2 (CWS) | 7-May-10 |
| | 2,000.0 | 3,000.0 | GE Water & Process Technologies - AZ8104 | Copper Inhibitor at Unit 2 Cooling Tower (CWS) | 7-May-10 |
| | 295.0 | 566.0 | Slack Company - Sodium Bisulfite Solution | Water Treatment (reduce hypobromite and hypochlorite to its salt prior to dicharge to Outfall) (SWP) | 30-May-08 |
| 40B (001 or 040) | 4.0 | 6.0 | Hild & Associates - Bio-Star (solid) | Flocculent for Forebay Cleaning at Unit 2 | 11-May-09 |
| | 58.6 | 117.2 | Hild & Associates - Bio-Star (2% solution) | Flocculent for Forebay Cleaning at Unit 2 (Outfall 040) | 23-May-19 |
| | 58.6 | 71.6 | Hild & Associates - Bio-Star (2% solution) | Flocculent for Forebay Cleaning at Unit 2 (Outfall 001) | 23-May-19 |

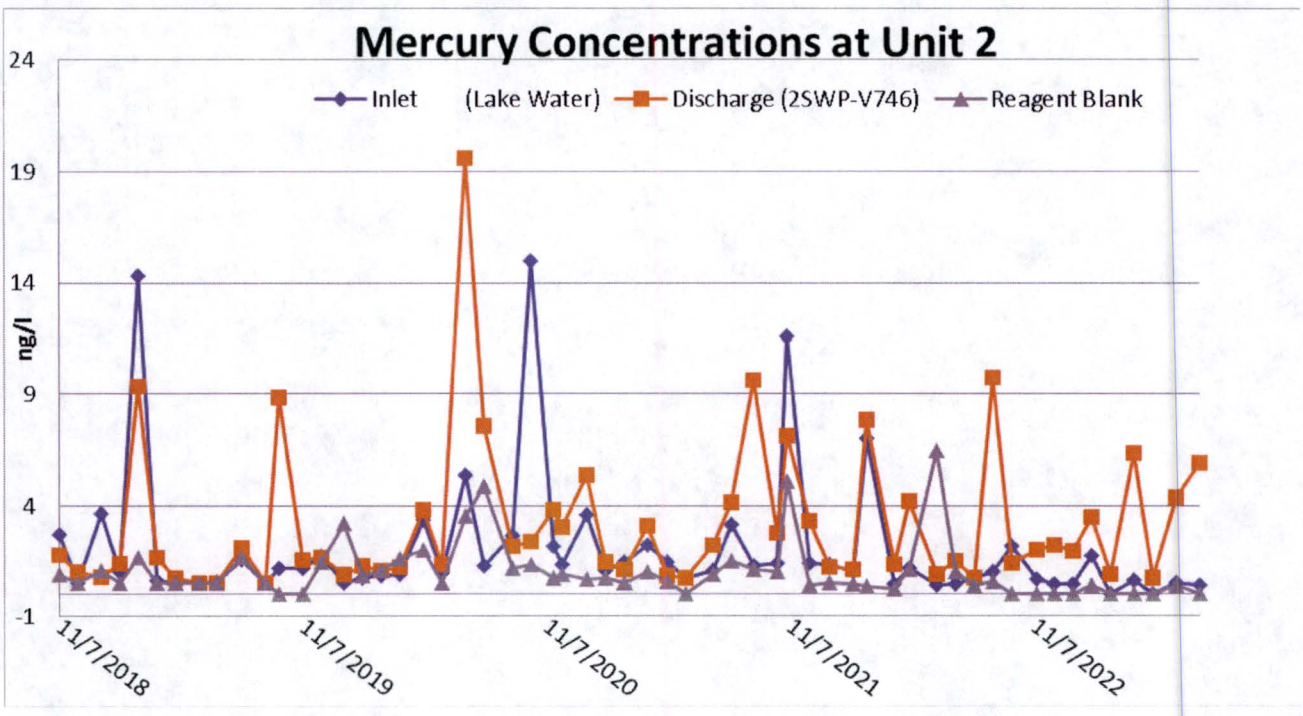
# Appendix B

# NMPNS Additional Permit Modification Requests

**Appendix B – Attachment 1 – Request to Modify Mercury Minimization Plan to Reduce the Sampling Frequency at Outfall 040**

The state-wide water quality-based effluent limit for mercury in New York is 0.7 ng/L. In accordance with NY 000-1015, Mercury Minimization Program Requirements – Outfall 040, Nine Mile Point has developed, implemented, and maintained a Mercury Minimization Program (MMP) for Outfall 040. NMPNS investigations of trending data have revealed that the usage of sulfuric acid WTC were a contributing source of mercury concentrations above the lower-level detection limit in Outfall 040 and have since transitioned to the usage of sulfuric acid WTC with lower mercury content. Mercury content in sulfuric acid has been reduced from 2 parts per million (ppm) to 0.01 ppm. Compare the attached Slack Chemical Company Inc. Technical Data Sheet for Sulfuric Acid (which has 2 ppm mercury) to the attached PVS Chemical Solutions Product Specification Sheet (which has 0.01 ppm mercury).

The below figure shows the mercury concentration at the Unit 2 intake and Outfall 040. Over the MMP monitoring periods of 2018-2023, low-level mercury concentrations in the discharge have consistently decreased, and have consistently been in compliance with the 50 ng/L daily maximum limit stated in the SPDES Permit.




NMPNS is presently required to sample and analyze for mercury once per month. As noted in Section 3(d) – MMP Modification in the Mercury Minimization Program, NMPNS respectfully requests a reduction of the sampling/analysis frequency at Outfall 040 from once-per-month to once-per-year.

# PVS Chemical Solutions, INC

*Quality Control Laboratory*

**Product Specifications**

## *Sulfuric Acid 93% High quality / Electrolytic grade*

| Analyte | Specification | Typical Analysis |
|---|---|---|
| Appearance | Clear, colorless oily liquid | Clear, colorless oily liquid |
| **$H_2SO_4$** | **93.20% minimum** | **93.20 – 94.50%** |
| **Degrees Baumé @60 F** | **66.00° minimum** | **66.02 – 66.15 °** |
| **Iron** | **40 ppm maximum** | **12 ppm** |
| **Sulfur Dioxide** | **40 ppm maximum** | **20 ppm** |
| Transmittance @ 435 nm | 80% minimum | 95% |
| Mercury, ppm Hg | 0.01 max. | < 0.01 |
| Nitrates, ppm $NO_3$ | 5 max. | < 3.0 |
| Arsenic, ppm As | 1 max. | < 0.2 |
| Chlorides, ppm Cl | 10 max. | < 0.4 |
| Antimony, ppm Sb | 1 max. | < 0.4 |
| Manganese, ppm Mn | 0.2 max. | < 0.1 |
| Selenium, ppm Se | 20 max. | < 0.4 |
| Zinc, ppm Zn | 40 max. | < 0.2 |
| Ammonium, ppm $NH_4$ | 10 max. | < 0.8 |
| Nickel, ppm Ni | 1 max. | < 0.2 |
| Copper, ppm Cu | 50 max. | < 0.4 |
| Fixed residue, ppm | 300 max. | < 300 |
| Platinum, ppm Pt | Pass | Pass |
| Organic matter | Pass | Pass |

Analytes in **bold** are listed on a standard certificate of analysis. Other analytes listed can be included on the certificate of analysis if requested.

***Acceptance Signatures***

| **Customer** | **PVS Chemical Solutions, Inc.** |
|---|---|
| **Name:** | **Name:** Dale Price |
| **Title:** | **Title:** Technical Manager |
| **Date:** | **Date:** |
| **Contact Information:** | **Contact Information:** 773-913-7718 |
| | 12260 S. Carondolet Ave., Chicago, IL 60633 |
| | dprice@pvschemicals.com |

## Technical Data

# Sulfuric Acid, 93%

Certified to NSF/ANSI 60

| ANALYSIS | TYPICAL RESULTS |
|---|---|
| Assay, wt% $H_2SO_4$ | 93.2 – 95.0 |
| Color, APHA | 70 max |
| Clarity, % @ 500 nm | 70 min |
| Chlorides, ppm Cl | 10 max |
| Iron, ppm Fe | 50 max |
| Mercury, ppm Hg | 2 max |
| Nitrates, ppm $NO_3$ | 20 max |
| Sulfur Dioxide, ppm $SO_2$ | 50 max |
| Specific Gravity @ 16°C | 1.825 min |

*NOTICE: The information present herein, while not guaranteed, is true and accurate to the best of our knowledge. No warranty or guarantee, expressed or implied, is made regarding performance, stability or otherwise. While our technical personnel will respond to any questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any applicable law.*

*6/12/09*

| DEC Identification Number 7-3556-00013/00001 | SPDES Permit Number NY0001015 | Facility Name Nine Mile Point Nuclear Station |
|---|---|---|

**Appendix B – Attachment 2 – Requested Modification to Footnote 6**

Footnote 6 of the SPDES Permit NY-000 1015 specifies conditions under which temperature limits may be exceeded. Nine Mile Point Nuclear Station respectfully requests that the limitation exceedance conditions are modified to apply on a calendar year basis (January 1 to December 31) rather than an operating-year basis. The requested language modification is provided below.

*6. The intake temperature for this designated outfall shall be considered that temperature existing after intake waters have been tempered. The Intake - Discharge Temperature Difference limit may be exceeded during periods when plant safety is at issue, during periods when the circulating water system (CWS) is experiencing an emergency situation that is outside the normal operating envelop or during routine maintenance of the system, such as, but not limited to, the following situations: debris blockage of a CWS component, an emergency steam release, pump breakdown, etc. In the event of such an emergency/breakdown, the permittee shall take corrective action to bring the temperature parameter within the permit limit as soon as possible. The permittee, whenever possible, should take action to avoid temperature parameter exceedance from June through September.*

*In the event that the facility is experiencing inlet icing conditions during the winter season, the Intake - Discharge Temperature Difference limit (ΔT) may be exceeded by 35%, or 12.25 ° F, for no more than one hour during each reverse flow or return to normal flow operation. The facility may exceed the 35% criteria for a period of fifteen (l5) minutes when the facility returns to normal flow configuration. This momentary increase during return to normal flow configuration is acceptable.*

*The permittee shall indicate in the Discharge Monitoring Report the reason for operating outside of the permit limit, and the dates and times of the associated event. In no case shall the permit limitation be exceeded for more than 5% of the operating time during the ~~operating~~ calendar year.*