



**Constellation
Generation Group**

Nine Mile Point
Nuclear Station

September 27, 2002
NMPE 0337

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

Subject: Nine Mile Point Unit 2
Docket No. 50-410 (License No. NPF-69)
Report of the Status of the Nine Mile Point Nuclear Station
State Pollutant Discharge Elimination System Permit (SPDES)

Gentlemen:

Pursuant to Section 3.2 of the Nine Mile Point Nuclear Station (NMPNS) Unit 2 Facility Operating License No. NPF-69, Appendix B, Environmental Protection Plan, enclosed is the proposed modification to the Facility's SPDES Permit #NYS 000 1015. Section 3.2 of the Environmental Protection Plan requires NMPNS to notify the Commission of a SPDES Permit modification at the same time the application is submitted to the permitting agency.

If you have any questions concerning the notification, please contact Kent E. Stoffle, Supervisor, Environmental Protection, at (315) 349-1364.

Very truly yours,

Denise J. Wolniak
Manager Licensing

DJW/KES/jm

Enclosure

cc: Mr. H.J. Miller, Regional Administrator, Region I
Mr. G.K. Hunegs, Senior Resident Inspector
Mr. P.S. Tam, Senior Project Manager, NRR (2 copies)

IE25

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bcc: J. Petro (Constellation Power Source, Inc.)
T. Ringger (Constellation Nuclear Services)
Records Management



**Constellation
Generation Group**

Nine Mile Point
Nuclear Station

September 27, 2002
NMPE 0316

Mr. Ralph Manna
Regional Permit Administrator
New York State Department of Environmental Conservation
615 Erie Blvd. West
Syracuse, New York 13204-2400

***Subject: Nine Mile Point Nuclear Station
SPDES Permit #NY0001015
SPDES Permit Modification Request***

Dear Mr. Manna:

Please find attached a listing of Nine Mile Point Nuclear Station's (NMPNS's) proposed changes to State Pollution Discharge Elimination System (SPDES) Permit No. NY 000 1015 for the above referenced facility. Many of these changes had been identified by Mr. William McCarthy of your office during his SPDES site inspection of June 27, 2001, and discussed with him during his SPDES site inspection of July 22, 2002.

If you or your staff have any questions concerning the attached modification request, please feel free to contact Mr. Kent Stoffle, Supervisor Environmental Protection at (315) 349-1364.

Very truly yours,

Bruce S. Montgomery
General Manager Nuclear Engineering

BSM/KES/jm

Enclosure

cc: P. Kolokowski, NYSDEC
W. McCarthy, NYSDEC

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NMPE 0316

bc: J. Petro (Constellation Power Source, Inc.)
J. Hovey (Constellation Nuclear Services, Inc.)
T. Ringger (Constellation Nuclear Services, Inc.)
Records Management

Enclosure

SPDES Permit Modification Request

Nine Mile Point Nuclear Station, LLC
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The first nine (9) items addressed in this modification request are items set forth in the New York State Department of Environmental Conservation (NYSDEC) letter dated July 2, 2001, from Mr. William McCarthy (Attachment 1). The remaining items are administrative/editorial or minor modifications to the SPDES permit. A mark-up of the current State Pollutant Discharge Elimination System (SPDES) Permit with the proposed changes is included as Attachment 2. A list of all attachments is included at the end of this request.

1. **Issue:** Additional designation of the new chemical unloading station drain. [ref. Attachment 1, Item 1]

Discussion: A concrete containment pad has been constructed to satisfy hazardous chemical unloading containment requirements pursuant to 6 NYCRR Part 598. The containment pad drains to the adjacent gravel area via a "mud" valve. The drain valve is closed when a delivery vehicle is transferring chemicals to the facility's storage tanks within the Unit 2 screen house, or if a product-containing vehicle is temporarily stored within the containment. If precipitation waters accumulate when this valve is in the closed position, and no chemical product has spilled within the containment structure, these uncontaminated precipitation waters are discharged to the adjacent stones upon the removal of the delivery vehicle. The drain valve is normally maintained in the open position to allow drainage when the containment structure is vacant of delivery vehicles. If a spill did occur during a product transfer, the containment structure would provide the necessary spill protection to comply with 6 NYCRR Part 598, and the spill would be managed per NMPNS spill procedures and the Spill Prevention Report (SPR).

Other structures on site, e.g., structures containing oil-filled electrical equipment, perform similar functions and are subject to the same drainage criteria.

Request: Based on the above information, add a footnote to Outfalls 001, 002 and 020 that allows the discharge of uncontaminated storm water from containment structures to the surrounding grounds/Outfalls (Outfall 001, 002 and 020).

The suggested language for the footnote is in Attachment 3, footnote 'q'.

2. **Issue:** Clarification of permit language for Outfall 007, 'Floor and Equipment Drains' [ref. Attachment 1, Item 2]. This is interpreted as identification of the contributing floor and equipment drains to Outfall 007.

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2. (Continued)

Discussion: Outfall 007 actually has seven identified contributing sources, as follows:

007	-	Floor and equipment drains
007A	-	Manhole #110, Unit 2 Chiller Building
007B	-	Unit 1, Administration, Sump 1
007C	-	Unit 2, Service Water, 2DFM – Sump 2B
007D	-	Unit 2, Service Water, 2DFM – Sump 2A
007E	-	Unit 2, Control Building, 2DFM – Sump 4
007F	-	Manhole #103, Unit 2 Screen House – West
007G	-	Manhole #207, Unit 2 Screen House – North

Request: Identify specific drains 007A through 007G on the permit monitoring location schematic as the contributing sources to Outfall 007. The permit monitoring location schematic is Attachment 2 in the permit (page 11 of 17 of the current permit). The existing permit parameters and limitations for the current Outfall 007 will apply to these newly designated locations. A proposed modification to the schematic is included as Attachment 10 to this application.

3. **Issue:** Permit footnote for adjoining sumps at Outfall 040A, 'Circulating Water Pumps – Area Sumps' [ref. Attachment 1, Item 3].

Discussion: Unit 2 has two circulating water pump (CWP) pits, each of which has a separate sump that discharges via Outfall 040A to Outfall 040, 'Cooling Tower Blowdown and Service Water'. The sumps are not specifically identified in the permit.

Request: Add a footnote to Outfall 040A that specifically identifies the CWP pit sumps as contributing sources to Outfall 040A.

The suggested language for the footnote is in Attachment 3, footnote 'r'.

4. **Issue:** Deletion of Outfall 022, 'Security Building Air Conditioning' [ref. Attachment 1, Item 4].

Discussion: The Unit 1 Security Building air conditioner condensation currently discharges to the on-site Wastewater Treatment Plant (Outfall 030) in accordance with footnote 'h' of the existing SPDES permit. Outfall 022 is also designated as an approved discharge location for this air conditioning condensation, but NMPNS has not used Outfall 022 as a discharge point in over five years. Furthermore, the existing permit allows for the discharge of air conditioning condensation via the Unit 1 storm drain system (Outfall 020).

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4. (Continued)

Request: Remove Outfall 022 from the SPDES permit based on the information provided above. In addition, add footnote (h) to Outfall 030.

5. **Issue:** Reporting of a calculated value for copper at Outfall 040, 'Cooling Tower Blowdown and Service Water' [ref. Attachment 1, Item 5]. In particular, specify the calculation equation and parameters used in this determination.

Discussion: Permit footnote 'g' for Outfall 040 states that "the total copper concentration for Outfall 040 will be based on a calculated value taking into consideration the flow from the service water system". However, the specific equation and parameters used in the calculation are not identified in the permit.

The following equation is used for the calculated copper value for Outfall 040 to satisfy footnote 'g' of the facility's SPDES permit.

Total copper concentration at Outfall 040 =

$$\frac{[CWS]_{Cu} \times \text{CWS Blowdown Flow}}{\text{Total Flow for Outfall 040}} + \frac{[CWS]_{Cu} \times \text{Tempering Flow}}{\text{Total Flow for Outfall 040}}$$

Where:

$[CWS]_{Cu}$ = Copper concentration of Circulating Water System (CWS) Blowdown

Total Flow for Outfall 040 = CWS Blowdown Flow & Service Water Discharge Flow

Tempering Flow = The amount of service water (discharge effluent) used to temper the service water influent during winter months

Request: Modify footnote 'g' to include the above equation and parameters for the calculation of the copper concentration at Outfall 040. The full, modified text of footnote 'g' is included in Attachment 3, footnote 'g'.

6. **Issue:** Discharge of transformer containment to an identified outfall [ref. Attachment 1, Item 6].

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6. (Continued)

Discussion: There are several secondary containment systems on site for oil-containing electrical equipment, primarily transformers. The containment structures must be periodically drained of precipitation water in order to maintain required containment capacity. This water is routinely uncontaminated, but is visually inspected prior to each drain event. Each inspection and draining is performed in accordance with the facility's Spill Prevention, Control and Countermeasure (SPCC) plan, which conforms to 40 CFR Part 112. When drained, these waters are discharged to the surrounding ground surface.

Request: Apply the proposed footnote listed in Item 1 of this modification request (see proposed footnote 'q' in Attachment 3) to address the discharge of uncontaminated storm water from various structures. The footnote should be generally applied to similar on-site structures that may accumulate storm water, provided inspections are performed prior to draining.

7. **Issue:** Modification of Outfall 026, 'Unit #2 Resin Regeneration, Demineralized Test Water, and Reverse Osmosis Wastewater' [ref. Attachment 1, Item 7]. Although potential deletion of the outfall is identified in Attachment 1, only flexibility in directing Outfall 026 is at issue.

Discussion: Outfall 026 is designated for Unit #2 resin regeneration wastewater, demineralized test water and reverse osmosis water. This outfall currently discharges to the Wastewater Treatment Plant (Outfall 030). However, the original plant design configuration was engineered to also allow these flows to discharge via Outfall 040, 'Cooling Tower Blowdown and Service Water' or Outfall 030, 'Wastewater Treatment Plant'. The original SPDES Permit was permitted to allow this outfall to discharge via Outfall 040.

Allowing the flexibility to discharge Outfall 026 to Outfall 040 would relieve the Wastewater Treatment Plant (Outfall 030) of a hydraulic loading of "clean" waters. The waters that discharge from Outfall 026 are primarily demineralized waters.

Request: Modify the permit monitoring location schematic (Attachment 2, page 11 of 17, in the permit) to allow Outfall 026 to discharge to Outfall 040 in addition to the currently permitted discharge to the Wastewater Treatment Plant (Outfall 030), i.e., either discharge location would be acceptable. When discharging to Outfall 040, effluent parameters of flow, pH and oil and grease would apply with quarterly monitoring requirements. The current discharge effluent parameter of flow would remain when discharging to Outfall 030. Attachment 10 of this modification is a revised monitoring location schematic incorporating these changes.

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8. **Issue:** Clarification of the frequency of flow monitoring for Outfall 010, 'Condenser Cooling Water Unit 1' [ref. Attachment 1, Item 8].

Discussion: NMPNS calculates Outfall 010 flow using pump curve data and lake level data. The lake level is obtained from the pressure reading on the "Adams Strainer", which is proportional to lake level. Personnel that take the readings are only available during normal working hours (Monday through Friday) for recording this data. Since the personnel that take the lake level reading are not available on weekends and holidays, the lake level data from the previous surveillance is used in calculating flows for weekends and holidays.

Request: Based on the above, add a footnote to Outfall 010 that specifies the parameters and frequency for obtaining data to calculate the condenser cooling water flow rate. Suggested wording is included as footnote 's' in Attachment 3.

9. **Issue:** The revision and/or clarification of footnote 'a' on page 5 of 17 of the SPDES permit regarding the temperature differential conditions for reverse flow conditions and plant safety conditions during emergencies [ref. Attachment 1, Item 9].

Discussion: Unit #1 occasionally needs to reverse flow for its condenser cooling water in order to de-ice its intake structures. The permit allows an intake-discharge temperature difference of 35°F that per footnote 'a' may be exceeded by 35% (an additional 12.25°F, or 47.25°F total) for no more than one hour during each reverse flow or return to normal flow operation. However, a momentary increase above the 47.25°F value takes place during the initial change from reverse flow back to normal flow. This occurs because at the point of changing back to normal flow from reverse flow, already warmed water in the intake tunnel that has discharged from the condenser becomes the inlet water to the condenser. This water is further warmed as it passes through the condenser for a second time. When it discharges the condenser, it is being compared to cold lake water that is now the condenser inlet water. This temporary situation results in a temperature spike until the above normal temperature water is removed from the discharge tunnel. This temperature situation lasts for no more than fifteen (15) minutes.

Request: Modify footnote 'a' to allow a temporary exceedance of the 35% criteria when returning from reverse flow to normal flow operation. The period should be limited to 15 minutes. Suggested wording to modify footnote 'a' is included in Attachment 3.

10. **Issue:** Outfall 020, 'Storm Drainage Unit #1, Perimeter Drains and Condensation Water', currently has a requirement to monitor flow with no discharge limitation.

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10. (Continued)

Discussion: Currently, the facility calculates the flow based on precipitation because the outfall does not have a flow weir. Installation of a flow weir, or some other flow measurement device, at the discharge would be extremely difficult to maintain and keep operational due to wave and ice action from Lake Ontario. Additionally, it is NMPNS's position that the flow parameter does not provide the public with any useful data.

Request: Remove the flow parameter for this outfall. If the parameter is not removed, the analysis frequency should be changed to monthly since this is a continuous, not batch, discharge.

11. **Issue:** The removal of Inhibitor AZ8103 from Outfall 040, 'Cooling Tower Blowdown and Service Water (Unit #2)', and the addition of CUPROSTAT PF and Inhibitor AZ8104.

Discussion: Inhibitor AZ8103 is no longer in production by the supplier and therefore no longer used at the facility. The recommended substitute for this product is either Inhibitor AZ8104 or CUPROSTAT PF. NMPNS received NYSDEC approval for use of these products on September 28, 2001, from the NYSDEC Division of Water. [ref. Attachments 5 and 6].

Request: Add Inhibitor AZ8104 and CUPROSTAT PF to Outfall 040. The discharge limit for Inhibitor AZ8104 should be 8.8 mg/l and for CUPROSTAT PF should be 19.5 mg/l [see Attachment 4]. In addition, footnote 'o' should be modified accordingly. Suggested modification wording for footnote is included in Attachment 3.

Correspondingly, delete Inhibitor AZ8103 from Outfall 40 parameters.

12. **Issue:** Outfall 025, 'Unit #2 Cooling Tower Emergency Overflow', copper discharge limit.

Discussion: When Outfall 025 discharges, there is a high probability that the facility will exceed the copper limit at this discharge location point. Based on the permit, the discharge limitation for copper is 0.25 mg/l at the lake discharge. The copper concentration at the lake discharge is calculated in accordance with footnote 'g'. Due to dilution effects, the copper concentration in the cooling tower basin can be as high as 1.0 mg/l and still meet the 0.25 mg/l discharge limit to the lake. Historically the concentration of copper in the cooling tower basin is maintained below 0.3 mg/l with the use of corrosion inhibitors.

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12. (Continued)

An overflow event occurs very infrequently (less than once per year), and the discharge is expected to be less than one hour duration for the event. An overflow condition has not occurred since February 1995. When the event occurs, the basin overflows to a storm water ditch that ultimately discharges to Lake Ontario approximately one half mile down stream of the overflow point without the benefit of any significant dilution.

By raising the limit, the limit will be consistent with the concentration maintained in the basin for normal operation and NMPNS will be able to meet the limitation in the event of an Emergency Overflow with insignificant environmental impact.

Request: Raise the copper limit for Outfall 025 to 1.0 mg/l.

13. **Issue:** The designation of footnote 'I' on Page 5 of 17 of the SPDES permit.

Discussion: Footnote 'i' is incorrectly typed as an 'I' in the permit. This is merely a typographical error.

Request: Correct the designation for footnote (i) on page 5 of 17 to a lower case letter 'I' instead of a upper case letter 'I'.

14. **Issue:** The removal of Betz ClamTrol (whole product) and CT-1 parameters and discharge limitation from page 6 of 17 of the facility's permit.

Discussion: Betz ClamTrol and CT-1 are currently listed as parameters for Outfalls 010, 'Condenser Cooling Water Unit #1', and 040, Cooling Tower Blowdown and Service Water' on page 6 of 17 of the permit. However, these products are no longer available for use.

Request: Remove the reference to Betz ClamTrol (whole product) and the CT-1 parameter and discharge limitations for Outfalls 010 and 040 in the permit. The Discharge Monitoring Report (DMR) line item for this product should also be removed.

15. **Issue:** Modification of the sampling frequency for Spectrus CT1300 and Calgon H-130M at Outfalls 010, 'Condenser Cooling Water Unit #1', and 040, Cooling Tower Blowdown and Service Water' on page 6 of 17 of the permit.

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15. (Continued)

Discussion: Spectrus CT 1300 and Calgon H-13OM are currently approved for use for the zebra mussel control program. During treatment, grab samples are required at intervals not to exceed 3 hours. However, zebra mussel treatments using EVAC, which is used more often, require sampling at 8-hour intervals. Sampling at 8-hour intervals provides adequate control and protection of the environment, as demonstrated by controls implemented during EVAC treatments.

Request: Reduce the sampling frequency for Spectrus CT 1300 and Calgon H-13OM from 3 hours to 8 hours, consistent with EVAC sampling requirements.

16. **Issue:** Relief from the 60 day reporting requirement when using Calgon EVAC product, as listed on page 7 of 17 of the permit.

Discussion: Special Condition No. 6 for EVAC zebra mussel treatments requires that reports describing the results of the effectiveness of the zebra mussel control program and the effluent analyses for Calgon EVAC be submitted to the NYSDEC within 60 days following each chemical treatment. However, for similar treatments using Betz products, reports on the zebra mussel program are only required annually [ref. Special Condition No. 6 for Betz products, permit page 6 of 17]. Annual reporting for EVAC applications would provide similar control and review and would be consistent with the Betz zebra mussel control program reporting requirements.

Request: Modify the 60-day reporting requirement in Special Condition No. 6 on page 7 of 17. Instead require submittal of one annual report that reports on all EVAC treatments performed during the previous calendar year, with submission by March 1st of each year.

17. **Issue:** Discharge location for Outfall 001A, 'Decay Heat Cooling Tower Blowdown'.

Discussion: The decay heat cooling tower uses city water as the system's makeup water source. The concentration of free available chlorine in city water was recently analyzed at 0.59 mg/l (3/30/02). During the cooler months (i.e., December to March) the evaporation rate and the biological demand within the system are very low. Because of this, the concentration of free available chlorine in the system may exceed the SPDES limitation of 0.2 mg/l for total residual chlorine. An alternate water source is not readily available.

Request: Redirect the blowdown flow from the decay heat cooling tower to Outfall 040, 'Cooling Tower Blowdown and Service Water (Unit #2)'. The total residual chlorine will be monitored at the discharge of Outfall 040. The suggested language for the footnote is in Attachment 3, footnote 'u'.

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18. **Issue:** Discharge of storm water from cable/electric conduit structures.

Discussion: The Unit 2 switchyard contains underground cable/electrical conduit structures that may accumulate storm water. There is no inherent source of contamination in these structures. The accumulated water is discharged to the ground. Discharge of storm water from these structures is essentially similar to handling of storm water in outdoor secondary containment structures, except that there is no contaminant source in the conduit structures. Therefore, discharge of storm water from these structures to the adjoining ground should be acceptable.

Request: The suggested footnote listed in Item 1 of this modification request addresses the issue of discharges of uncontaminated waters from various structures. This footnote (footnote 'q' in Attachment 3) should be generally applied to similar on-site structures subject to storm water and/or groundwater accumulation, including underground cable/electrical conduit structures.

19. **Issue:** Correction of the DMR for Outfall 041, 'Unit #2 Wastewater'.

Discussion: The monitoring frequency and sample type currently listed for Outfall 041 in the DMR are listed as 'Continuous, Recorder', which is incorrect. The SPDES permit actually requires the specific conductance to have a measuring frequency of each batch with a sample type of grab. [ref. Attachment 7]

Request: Change the DMR reporting criteria for Outfall 041 to once per batch with a sample type of grab.

20. **Issue:** Action Level requirements for Outfall 011, 'Unit #1 Wastewater' and Outfall 041, 'Unit #2 Wastewater'.

Discussion: Outfall 011 and 041 Action Level Requirements, page 9 of 17 of the SPDES Permit, require the facility to monitor these outfalls for phenolics. Review of the past 4 years of monitoring data indicates that the concentrations of phenolics for both outfalls have been below the detection limit of 0.1 mg/l, compared to an action level of 1.0 mg/l. [ref. Attachment 8]

It is NMPNS's position that further monitoring for phenolics will not provide the public with any useful data. The analytical/operational history indicates that continued monitoring is no longer warranted.

Request: Remove the action level requirement for phenolics from Outfalls 011 and 041.

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21. **Issue:** Removal of definitions in the SPDES Permit.

Discussion: The current SPDES Permit includes definitions for daily average and daily maximum [permit page 11 of 17]. The recent revision of the Discharge Monitoring Manual provides the definition of these terms. Maintaining definitions within the permit

21. (Continued)

is duplicative.

Request: Remove definitions of daily average and daily maximum (SPDES Permit page 11 of 17) from the permit.

22. **Issue:** Use of barley straw for pH control in Outfall 023, 'Unit 1 Oil Retention Basin'.

Discussion: Precipitation from the Unit #1 switch yard collects in the oil retention basin, which discharges via Outfall 023. During the summer months the pH in the basin exceeds the SPDES permit limitation of 9.0 due to the growth of algae. The practice of using barley straw to control pH in this type of environment has proven to be very effective.

Request: Add a footnote to Outfall 023 allowing the use of barley straw to control pH in the basin. Suggested language is included in Attachment 3 as footnote 't'.

23. **Issue:** Action Level requirements for Outfall 007, 'Floor and Equipment Drains'.

Discussion: Outfall 007 collects uncontaminated water from floor and equipment drains. The Action Level Requirements for this outfall (page 9 of 17) require the facility to monitor this outfall for aluminum, barium, manganese and zinc. Review of the past 4 years of monitoring data indicates that the concentrations of barium and manganese have not exceeded 13% of their respective action levels during the period (<0.2mg/l Ba vs. an action level of 1.5 mg/l and <0.1 mg/l Mn vs. an action level of 1.0 mg/l). [ref. Attachment 8]

It is NMPNS's position that further monitoring for barium and manganese will not provide the public with any useful data. The analytical/operational history indicates that continued monitoring for barium and manganese is no longer warranted.

Request: Remove the action level requirements for barium and manganese from Outfall 007.

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24. **Issue:** Action Level requirements for Outfall 020, 'Storm Drainage Unit #1, Perimeter Drains, Condensation Water'.

Discussion: Outfall 020 collects uncontaminated storm water drainage from Unit #1. Action Level Requirements, page 9 of 17 of the permit, require the facility to monitor this outfall for zinc and aluminum. Review of the last 4 years of monitoring data indicates that the maximum zinc concentration during the period has been less than 22% of the action level (<0.1 mg/l vs. action level of 0.45 mg/l) and is routinely at a much lower level. Aluminum concentrations have not exceeded 60% of the action level (0.3 mg/l vs. action level of 0.5 mg/l) and are routinely well under 10% of the action level. [ref. Attachment 8]

It is NMPNS's position that further monitoring for zinc and aluminum will not provide the public with any useful data. The analytical/operational history indicates that continued monitoring for zinc and aluminum is no longer warranted.

Request: Remove the action level requirements for zinc and aluminum from Outfall 020.

25. **Issue:** Update permit Attachments 1, 'Site Diagram' and 2, 'Monitoring Locations Schematic'.

Discussion: The site diagram and monitoring locations schematic, Attachments 1 and 2 to the permit, respectively, have become difficult to read due to repetitive copying. In addition, changes reflecting the proposed modifications in this application are incorporated.

Request: Replace the current Attachments 1 and 2, pages 10 and 11 of 17, with the updated versions enclosed in this permit modification application [Attachments 9&10].

26. **Issue:** Editorial changes.

Discussion: Several administrative/editorial changes to the permit are required due to changes in ownership of the facility, personnel changes, etc.

Request: Incorporate the following changes:

- Page 12 of 17 , Additional Requirements, Item Nos. I.5 and I.6 – change Niagara Mohawk to NMPNS
- Page 17 of 17, Recording, Reporting, and Additional Monitoring Requirements, Item 'b' – update the mailing address and phone number for the NYS DEC Albany Office.

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26. (Continued)

- Page 1 of 17, Permittee Name and Mailing Address – change to the following:

Name: Nine Mile Point Nuclear Station, LLC (NMPNS)
Attention: Supervisor Environmental Protection
Street: PO Box 63
City: Lycoming State: NY Zip Code: 13093

- Page 1 of 17, Facility Name and Address – change to the following:

Name: Nine Mile Point Nuclear Station (NMPNS) County: Oswego
Location(C,T,V): Scriba (T)
Facility address: 348 Lake Road
City: Oswego State: NY Zip Code: 13126

- Page 1 of 17, Discharge monitoring Report (DMR) Mailing Address – change to the following:

Mailing Name: Nine Mile Point Nuclear Station, LLC (NMPNS)
Street: PO Box 63
City: Lycoming State: NY Zip Code: 13093
Responsible Official or Agent: Supervisor Environmental Protection
Phone: (315) 349-1364

Nine Mile Point Nuclear Station, LLC
SPDES Permit #NY0001015
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List of Attachments

Attachment 1	Letter from W. McCarthy to R. Abbott, July 2, 2001
Attachment 2	SPDES Permit NY 000 1015 – Mark Up
Attachment 3	Proposed Permit Footnote Amendments and Additions
Attachment 4	Chemical Use Request for Inhibitor AZ8104 and CUPROSTAT PF
Attachment 5	NYSDEC WTC Usage Notification – CUPROSTAT PF
Attachment 6	NYSDEC WTC Usage Notification – Inhibitor AZ8104
Attachment 7	DMR Mark Up for Outfall 041
Attachment 8	1999-2002 Analytical Summary for Outfalls 007, 020 and 041
Attachment 9	Revised Site Diagram (Attachment 1 to the current permit)
Attachment 10	Revised Flow Chart (Attachment 2 to current permit)

Attachment 1

Letter from W. McCarthy to R. Abbott, July 2, 2001

New York State Department of Environmental Conservation
Division of Water, Region 7
615 Erie Boulevard West, Syracuse, New York 13204-2400
Phone: (315) 426-7500 • FAX: (315) 426-7459
Website: www.dec.state.ny.us



July 2, 2001

Mr. Richard B. Abbott
Vice President, Nuclear Engineering
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
348 Lake Road
PO Box 63
Lycoming, New York 13093

RE: SPDES (NY 000 1015) Inspection

Dear Mr. Abbott:

The scheduled SPDES inspection of your facility was conducted on June 27, 2001. Although the Department did not perform surveillance sampling at any of the outfalls, the discharges from Outfalls 001, 002, 020, and 030 appeared to be in compliance at the time of inspection. The remaining outfalls were not visible or had no discharge at the time of inspection.

Review of the Discharge Monitoring Reports (DMR's) since the last scheduled inspection indicates there was one exceedance of the SPDES permit's effluent limit for the parameter of Total Residual Oxidant (TRO) at Outfall 040 for the month of November, 2000. No additional exceedances for this parameter at this outfall have occurred.

The tours of the facility on September 20, 2000 and June 27, 2001 have yielded several issues that will necessitate a request for a permit modification. These included the following:

1. The additional designation of the new chemical unloading station drain.
2. Clarification of permit language for Outfall 007.
3. A potential permit footnote for adjoining sumps at Outfall 040A.
4. The potential deletion of Outfall 022.
5. The reporting of a calculated value for copper at Outfall 040.
6. The discharge of the transformer containment to an identified outfall.
7. The potential deletion of Outfall 026.

8. The frequency of flow monitoring at Outfall 010.
9. The revision and/or clarification of footnote (a) regarding the temperature differential conditions for reverse flow conditions and plant safety conditions during emergencies.

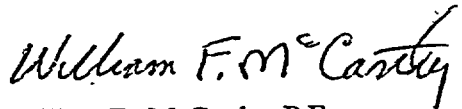
Please submit a request for a permit modification for these items and any others that may require identification in the SPDES permit.

The overall compliance rating of the facility is satisfactory.

If you have any questions or require additional information, please do not hesitate to contact me.

Thank you for your cooperation.

Sincerely,



William F. McCarthy, P.E.
Environmental Engineer 2

WFM/mma

cc: Ms. Denise Wolniak ✓
Mr. Michael McPeck

Attachment 2

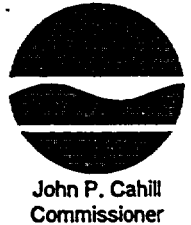
SPDES Permit NY 000 1015 – Mark Up

ORIGINAL

CONTROLLED

Attachment 2 of 19

New York State Department of Environmental Conservation
Division of Environmental Permits, Region 7
615 Erie Boulevard West, Syracuse, New York 13204-2400
Phone: (315) 426-7438 • FAX: (315) 426-7425
Website: www.dec.state.ny.us



NY0001015 Rev. 07

November 15, 1999

Janet Marden
Nine Mile Point Nuclear Station
P.O. Box 63
Lycoming, New York 13093

PICKED UP BY K. STOFFLE

RE: Modification of State Pollutant Discharge Elimination System Permit No. NY-000 1015,
Application ID No. 7-3556-00013/00001

Dear Ms. Janet Marsden:

This is to inform you that pursuant to Environmental Conservation Law (ECL), Article 70, and 6NYCRR, Part 621, the New York State Department of Environmental Conservation has made a determination to modify your State Pollutant Discharge Elimination System Permit (SPDES) referenced above for various modification.

Please discard the previous permit. This permit supersedes the previous permit.

Should you object to this modification, 6NYCRR Part 621.13(c) or Part 621.14(d) allows you to submit to the Department reasons why the permit should not be modified, or to request a hearing, or both. Such a submission or request must be received by the Regional Permit Administrator within 15 calendar days of your receipt of this letter.

If you have any questions, you may contact me at (315) 426-7438.

Sincerely,

Joanne L. March
Environmental Analyst 1

JLM:eb

cc: Water Division, Region 7
Oswego County Health Dept.
R. Hannaford - BWFD
EPA, Region II

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
NOTICE / RENEWAL APPLICATION / PERMIT

2 of 19



Please read ALL instructions on the back before completing this application form. Please TYPE or PRINT clearly in ink.

PART 1 - NOTICE

02/16/1999

 Permittee Contact Name, Title, Address
 7-3556-00013/00001

Facility and SPDES Permit Information

NIAGARA MOHAWK POWER CORP
JANET MARSDEN
PO BOX 63
LYCOMING NY 13093

Name: NINE MILE POINT NUCLEAR STATION U
Ind. Code: 4911 County: OSWEGO
DEC No.: 7-3556-00013/00001
SPDES No.: NY 000 1015
Expiration Date: 12/01/1999
Application Due By: 06/04/1999

Are these name(s) & address(es) correct? if not, please write corrections above.

The State Pollutant Discharge Elimination System Permit for the facility referenced above expires on the date indicated. You are required by law to file a complete renewal application at least 180 days prior to expiration of your current permit. Note the "Application Due By" date above.

CAUTION: This short application form and attached questionnaire are the only forms acceptable for permit renewal. Sign Part 2 below and mail only this form and the completed questionnaire using the enclosed envelope. *Effective April 1, 1994 the Department no longer assesses SPDES application fees.*

If there are changes to your discharge, or to operations affecting the discharge, then in addition to this renewal application, you must also submit a separate permit modification application to the Regional Permit Administrator for the DEC region in which the facility is located, as required by your current permit. See the reverse side of this page for instructions on filing a modification request.

PART 2 - RENEWAL APPLICATION

CERTIFICATION: I hereby affirm that under penalty of perjury that the information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Carl D. Terry

Vice President Nuclear Safety Assessment and Support

Name of person signing application (see instructions on back)

Title

Signature

Date

4/22/99

PART 3 - PERMIT (Below this line - Official Use Only)

Effective Date: 12/01/99 Expiration Date: 12/01/04

Lenore R. Kuwik

Address:

NYSDEC - Division of Environmental Permits
Bureau of Environmental Analysis
50 Wolf Road, Albany, NY 12233-1760

Permit Administrator

Signature

Date

7/15/99

This permit together with the previous valid permit for this facility issued 10/26/94 and subsequent modifications constitute authorization to discharge wastewater in accordance with all terms, conditions and limitations specified in the previously issued valid permit, modifications thereof or issued as part of this permit, including any special or general conditions attached hereto. Nothing in this permit shall be deemed to waive the Department's authority to initiate a modification of this permit on the grounds specified in 6NYCRR §621.14, 6NYCRR §754.4 or 6NYCRR §757.1 existing at the time this permit is issued or which arise thereafter.

Attachments: General Conditions dated 11/90



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT
 Special Conditions (Part 1)

Industrial Code: 4911
 Discharge Class (CL): 03
 Toxic Class (TX): T
 Major Drainage Basin: 03
 Sub Drainage Basin: 03
 Water Index Number: Lake Ontario
 Compact Area: IJC

SPDES Number: NY- 000 1015
 DEC Number: 7-3556-00013/00001
 Effective Date (EDP): 12/01/94
 Expiration Date (ExPD): 17/01/99
 Modification Dates: 6/95, 10/98, 9/96 & 11/15/99
 Attachment(s): General Conditions (Part II) Date: 11/90

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

MAILING
PERMITTEE NAME AND ADDRESS
 Name: ~~Niagara Mohawk Power Corp.~~ *Nine Mile Point Nuclear Station, LLC (NMPNS)* Attention: ~~Ms. J. Marsden~~ *Supervisor Environmental Protection*
 Street: P.O. Box 63
 City: Lycoming State: NY Zip Code: 13093

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS
 Name: ~~Nine Mile Point Nuclear Generating Station~~ *(NMPNS)*
 Location (C,T,V): Scriba (T) County: Oswego
 Facility Address: ~~348~~ Lake Road Zip Code: ~~13126~~ 13126
 City: ~~Lycoming~~ Oswego State: NY Zip Code: ~~13093~~
 NYTM -E: NYTM -N: 4
 From Outfall No.: 001 at Latitude: 43 ° 31 ' 17 " & Longitude: 76 ° 24 ' 39 "
 into receiving waters known as: Lake Ontario Class: A

and; (list other Outfalls, Receiving Waters & Water Classifications)

01A, 002, 007, 008, 010, 010A, 011, 020, 021, ~~022~~, 023, 024, 026, 030, 040, 040A, 040B, 041 - Lake Ontario, Class: A

025 - Lake Ontario, Class A, Groundwater Class GA

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: ~~Niagara Mohawk Power Corporation~~ *Nine Mile Point Nuclear Station, LLC (NMPNS)*
 Street: P.O. Box 63
 City: Lycoming State: NY Zip Code: 13093
 Responsible Official or Agent: ~~Ms. J. Marsden~~ *Supervisor Environmental Protection* Phone: (315) 349-4200 1364

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

DOW - R7
 3WFD
 EPA - Reg II
 Oswego Co. Health Dept.

Permit Administrator:	Robert A. Torba
Address	615 Erie Blvd. W. Syracuse, NY 13204-2400
Signature	Date 11/15/94

Mod. Effective Date 11/26

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDM = 11/15/99and lasting until 12/1/99

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg. Daily Max.		Units	Minimum Monitoring Requirements	
				Measurement Frequency	Sample Type

010 - Condenser Cooling Water Unit #1^{h,k} S

Flow	NA	417.6	MGD	Continuous	Calculated
Discharge Temperature	NA	115	°F	Continuous	Recorder
Intake - Discharge Temperature Difference ^{a,f}	NA	35	°F	Continuous	Recorder
Net Rate of Addition of Heat ^a	NA	4.405x10 ⁹	BTU/hr.	Hourly	Calculated
Total Residual Oxidant	NA	0.2	mg/l	Batch	Grab
Copper	NA	0.25	mg/l	Monthly	Grab

011 - Unit #1 Wastewater (Including Water Generated from Demineralizer, Reverse Osmosis Electrodeionization, Filtration, and Treated Radioactive Wastewater).^h

Flow*	Monitor	Monitor	MGD	Batch	Calculated
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Oil & Grease	NA	15	mg/l	Batch Before Discharge	Grab
Solids, Suspended	30	50	mg/l	Quarterly	Grab
Solids, Suspended	30	50	mg/l	Batch Before Discharge	Grab
pH	(6.0 - 9.0 Range ^d)		SU	Batch Before Discharge	Grab

020 - Storm Drainage Unit #1, Perimeter Drains, Condensation Water^h 9

Flow	Monitor	Monitor	GPD	Batch	Calculated
Oil & Grease	NA	15	mg/l	Quarterly	Grab

021 - Filter Backwash & Makeup Demineralizer Water Supply^h

Flow*	Monitor	Monitor	GPD	Batch	Calculated
Oil & Grease	NA	15	mg/l	Batch Each Discharge	Grab
Solids, Suspended	30	50	mg/l	Batch Each Discharge	Grab
pH	(6.0 - 9.0 Range)		SU	Batch Each Discharge	Grab

022 - Security Building Air Conditioning^g

Flow	Monitor	Monitor	GPD	Monthly	Calculated
Oil & Grease	NA	15	mg/l	Quarterly	Grab
Solids, Suspended	30	50	mg/l	Quarterly	Grab
pH	(6.0 - 9.0 Range)		SU	Quarterly	Grab

Modify after Item #10

delete

Mand. d. 7.4

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Monitoring Requirements		
	Daily Avg.	Daily Max.	Units	Measurement Frequency	Sample Type
001-002 - Storm Drainage^h , 8					
No Monitoring Required.					
Outfall 001A - Decay Heat Cooling Tower Blowdown^h , 6					
Flow	NA	Monitor	GPD	Monthly	Calculated
Temperature ^p	NA	90	°F	Monthly	Grab
Total Residual Chlorine	NA	0.2	mg/l	Monthly	Grab
007 - Floor and Equipment Drains^{e,h}					
Flow	NA	Monitor	GPD	Monthly	Estimated
Aluminum, Total	NA	4.0	mg/l	Monthly	Grab
Oil & Grease	NA	15	mg/l	2/Month	Grab
Solids, Suspended	30	50	mg/l	2/Month	Grab
pH	(6.0 - 9.0 Range)		SU	2/Month	Grab
Iron	NA	4.0	mg/l	2/Month	Grab
008 - Screen Well Fish Diversion System^{m,h}					
No Monitoring Required.					
010A & 040B - Units 1 & 2 Forebay Cleaning Basins^h					
Flow	NA	Monitor	MGD	2/Month During Periods of Discharge	Calculated
Oil & Grease	NA	15	mg/l	"	Grab
Total Suspended Solids	50	100	mg/l	"	Grab
040 - Cooling Tower Blowdown and Service Water (Unit #2)^{c,h}					
Flow ⁱ	NA	72.0	MGD	Continuous	Calculated
Discharge Temperature ⁱ		110(43.3)	°F(°C)	Continuous	Recorder
Intake-Discharge Temperature Difference ⁱ	NA	30(16.7)	°F(°C)	Continuous	Recorder
Net Addition of Heat	NA	0.47x10 ⁹	BTU/hr.	Daily	Calculated
Free Available Chlorine ⁿ	0.2	0.5	mg/l	Batch	Grab
Copper, Total ^o	NA	0.25	mg/l	Weekly	Grab
Inhibitor AZ8100 ⁴	NA	26.4 8.8	mg/l	Batch	Grab
Phosphorus (as P)	NA	0.5	mg/l	Monthly	Grab
pH	(6.0 - 9.0 Range)		SU	2/Week	Grab
Total Residual Oxidant ⁱ	NA	0.2	mg/l	Batch	Grab
040A - Circulating Water Pumps - Area Sumps^h , 6					
Flow	NA	Monitor	MGD	Monthly	Calculated
Oil & Grease	NA	15	mg/l	Monthly	Grab
041 - Unit #2 Wastewater (Including Demineralization Resin Reverse Osmosis Electrodeionization Filtration and Treated Radioactive Wastewater)^h					
Flow [*]	Monitor	Monitor	MGD	Monthly	Calculated
Oil & Grease	NA	15	mg/l	Quarterly ⁱ	Grab
Oil & Grease	NA	15	mg/l	Batch ⁱ	Grab
Solids, Suspended	30	50	mg/l	Quarterly ⁱ	Grab
Solids, Suspended	30	50	mg/l	Batch ⁱ	Grab
pH	(6.0 - 9.0 Range ^d)		SU	Batch	Grab
Conductivity	Monitor	Monitor	umho/cm	Batch	Grab
- CuPROSTAT PF	NA	19.5	mg/l	Batch	Grab

Modifier Item # 1,6,18

Modification Item #11

11/11/11

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDM = 11/15/99and lasting until 12/1/99

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>023 - Unit 1 Oil Spill Retention Basin^h , ^z</u>					
Flow	NA	Monitor	GPD	Each Discharge	Estimate
Oil & Grease	NA	15	mg/l	Each Discharge	Grab
pH	(6.0-9.0 Range)		SU	Each Discharge	Grab
<u>024 - NMP-1 Diesel Off Loading Pad Drainage^h</u>					
Flow	NA	Monitor	GPD	Each Discharge	Estimate
Oil & Grease	NA	15	mg/l	Each Discharge	Grab
pH	(6.0-9.0 Range)		SU	Each Discharge	Grab
<u>025 - Unit #2 Cooling Tower Emergency Overflow^h</u>					
Flow	NA	Monitor	GPD	Annual	Estimate
pH	(6.0-9.0 Range)		SU	Each Discharge	Grab
Copper, Total	NA	0.25 1.0	mg/l	Each Discharge	Grab
<u>026 - Unit #2 Resin Regeneration, Demineralized Test Water, and Reverse Osmosis Wastewater^h</u>					
Flow	NA	Monitor	GPD	Monthly	Estimate

Modified in Dec 12

FOOTNOTES:

*Monitoring Requirement Only.

- Revise per Modification request item #9*
- a. The intake temperature shall be considered that temperature existing after intake water tempering. In addition, during the winter season when inlet icing may occur, the delta temperature limitation may be exceeded by 35% for no more than one hour during each reverse flow or return to normal flow operation. These limitations may be exceeded during periods when plant safety is at issue or during periods when the circulating water system is experiencing an emergency situation that is outside the normal operating envelope or routine maintenance, i.e. debris blocking the condensers, an emergency steam release, pump breakdown, etc. In the event of such an emergency/breakdown the permittee shall take corrective action as soon as possible. Where possible, situations resulting in these limitations being exceeded should be avoided from June through September. The permittee shall indicate on a Discharge Monitoring Report (1) the reason for operating outside of the permit limit, (2) the dates and times of the event. In no case shall these limitations be exceeded more than 5% of the time during the operating year.
- b. These limits and monitoring requirements shall not apply if this wastewater is discharged upstream of the sewage treatment plant influent.
- c. There shall be no discharge of heat from the main condensers except heat may be discharged in blowdown from recirculated cooling water systems provided the temperature at which the blowdown is discharged does not exceed at any time the lowest temperature of recirculated cooling water prior to the addition of the makeup water. Outfall 040 includes cooling tower blowdown as well as service waterflow.
- d. pH range of 4.0 - 9.0 is allowable for wastewater having a conductivity of less than 10 umho/cm.
- e. Discharge from the two switchyard oil separators will be sampled before combination with waste stream 020.
- f. Computer data, logged at least hourly, may be utilized for this parameter in order to verify compliance during normal operating conditions. During unusual operating conditions or in situations where the hourly data is near the outfall limitation, chart recorder data will be reviewed and utilized to demonstrate compliance.
- g. Total copper samples should be obtained from the CWS blowdown line or the cooling tower basin. The total copper concentration for outfall 040 will be based on a calculated value taking into consideration the flow from the service water system.
- h. Permit outfalls with this designation may include wastewater sources of HVAC condensation, chlorinated city water, fire protection water, circulating (lake) water, service (lake) water, groundwater, precipitation water, demineralized water and surface runoff water. These sources are approved for discharge from the permit listed outfalls.
- i*
i. Changes in Service Water System flowrates should be made in a manner that minimizes the rapid discharge of deposited sediments during periods of normal operation above 5% power load.
- j. High purity wastewater discharges that have a conductivity of 10 umho/cm or less are permitted for an oil and grease and total suspended solids measurement frequency of once per calendar quarter.
- k. The use of sand separators at the Unit I Seal Water System and associated wastewaters are approved for discharge.
- l. Total residual oxidant applies only to treatments of Service Water System.
- m. During tempering of service waters with cooling water, a portion of the tempering waters will be discharged via this outfall. Furthermore, during drainage of the cooling tower system, a portion of these drainage waters will also be discharged via this outfall.
- n. The Free Available Chlorine sample shall be obtained prior to combination with Service Water.
- 4*
o. Discharge allowed when Inhibitor AZ810 concentration is at ^{8.8 mg/l} 6.4 ppm or less (whole product) ~~or 2.64 ppm Butyl Benzotriazole (active ingredient).~~ *and CUPROSTAT PF concentration is at 19.5 mg/l or less (whole product).*
- p. In no case shall the temperature limit be exceeded more than 5% of the time during the operating year.

[See Attachment 3 for additional proposed footnotes]

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDM = 11/15/99and lasting until 12/1/99

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>010, 040</u>					
Betz Clam-Trol (Whole Product) <i>delete</i>				Duration of chemical application and disch.	Multiple Grab* <i>Modification Item #14</i>
CT-1 <i>delete</i>	NA	0.2	mg/l	*	Multiple Grab* <i>X</i>
Spectrus CT 1300	NA	50	ug/l	*	Multiple Grab*
Calgon H-130M (Whole Product)	NA	50	ug/l	*	Multiple Grab*

* For purpose of this authorization multiple grab is defined as individual grab samples collected on intervals not to exceed three hours. *eight*

Special Conditions

1. Detoxification with bentonite clay or other Department approved adsorption medium is required. At least a 1:1 ratio with the initial concentration of molluscicide to detoxicant must be maintained.
2. Each individual mussel control treatment is limited up to a maximum of 24 hours addition of Molluscicide once-through treatment and limited to a maximum of 24 hours discharge of detoxified Molluscicide during a recirculation treatment.
3. Records of product use, effluent flow and concentration of product during application and discharge must be maintained.
4. The Regional Water Engineer shall be notified not less than 48 hours before initiation of zebra mussel control program.
5. Upon elimination of initial infestations, treatments are limited to not more than 4 times annually.
6. The reports describing the results of the effectiveness of the zebra mussel control program and effluent analyses for Molluscicide shall be submitted annually to Regional Water Engineer, NYSDEC.
7. This permit modification is issued based on the best environmental and aquatic toxicity information available at this time. This authorization is subject to modification or withdrawal any time new information becomes available which justifies such modification or withdrawal.

NOTE: For those situations where an effluent sample result is greater than the discharge limits due to suspected inadequate mixing of detoxicant, an additional sample shall be obtained as soon as possible to verify the initial result.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDM = 11/15/99

and lasting until 12/01/99

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
Unit #1 (010) EVAC (Whole Product)	NA	2.0**	mg/l	Duration of Chemical Application & Discharge	Multiple Grab*
Unit #2 (040) EVAC (Whole Product)	NA	1.0**	mg/l	Duration of Chemical Application & Discharge	Multiple Grab*
001 Equipment Sump Storm Drain EVAC - (Whole Product)	NA	.1	mg/l	One Treatment	Grab

* For purpose of this authorization, multiple grab is defined as individual grab samples collected at eight hour grab intervals during the duration of chemical addition and discharge.

** Calculated based on samples obtained before discharge.

Special Conditions

The Calgon EVAC program for zebra mussel control, application submitted by letter application dated May 29, 1998 to Paul Kolakowski and Joanne March is approved with the following conditions:

1. The concentrations at the mixing zone shall not exceed 20 ug/l (ppb) of Alkylamine or 35 ug/l (ppb) of whole product for Calgon EVAC, these limitations will be achieved by limiting whole product concentrations.
2. Each individual zebra mussel control treatment is limited to a maximum of 48 hours duration.
3. Treatments for zebra mussel control shall be limited to a maximum two treatments annually per plant. Treatments shall be separated by at least 45 days.
4. Records of product dosage concentration, effluent flow and effluent concentration of product during addition and discharge must be maintained. The flow shall be measured at the frequency specified for flow elsewhere in this permit or at the frequency of the parameter specified above, whichever is more frequent.
5. The Regional Water Engineer shall be notified not less than 48 hours before initiation of a zebra mussel control program.
6. Reports describing the results of the effectiveness of the zebra mussel control program and the effluent analyses for Calgon EVAC shall be submitted to the Regional Water Engineer, NYSDEC, ~~within 60 days~~ *in an annual report to be submitted by March 1st.*
7. This permit modification is issued based on the best environmental and aquatic toxicity information available at this time.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDM = 11/15/99and lasting until 12/01/99

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

LIMITATIONS APPLY: ☒ All Year ☐ Seasonal from _____ to _____Outfall Number 030⁽⁴⁾

EFFLUENT LIMITATIONS

(x) Flow	30 day arithmetic mean	<u>120,000</u>	<input type="checkbox"/> MGD	<input checked="" type="checkbox"/> GPD
(x) BOD, 5 - Day	30 day arithmetic mean	<u>25</u>	mg/l and	lbs/day ⁽¹⁾
() BOD, 5 - Day	7 day arithmetic mean		mg/l and	lbs/day
() UOD ⁽²⁾			mg/l and	lbs/day
(x) Solids, Suspended	30 day arithmetic mean	<u>25</u>	mg/l and	lbs/day ⁽¹⁾
() Solids, Suspended	7 day arithmetic mean		mg/l and	lbs/day
(x) Effluent disinfection required: <input checked="" type="checkbox"/> All Year <input type="checkbox"/> Seasonal from _____ to _____				
(x) Coliform, Fecal	30 day geometric mean shall not exceed	200/100 ml		
() Coliform, Fecal	7 day geometric mean shall not exceed	400/100 ml		
(x) Chlorine, Total Residual	Daily Maximum		<u>0.5</u>	mg/l
(x) pH Range			<u>6.0 - 9.0</u>	SU
(x) Solids, Settleable	Daily		<u>0.1</u>	ml/l
(x) <u>BOD, 5</u>	<u>Daily</u>		<u>45</u>	mg/l as
(x) <u>Suspended Solids</u>	<u>Daily</u>		<u>45</u>	
() _____	_____			
() _____	_____			
() _____	_____			

MONITORING REQUIREMENTS

Parameter	Frequency	Sample Type	Sample Location*	
			Influent	Effluent
(x) Flow, <input type="checkbox"/> MGD <input checked="" type="checkbox"/> GPD	<u>2/Month</u>	<u>Estimated</u>		<u>X</u>
BOD, 5 - Day, mg/l	<u>2/Month</u>	<u>Grab</u>		<u>X</u>
Solids, Suspended, mg/l	<u>2/Month</u>	<u>Grab</u>		<u>X</u>
Coliform, Fecal, No./100 ml ⁽³⁾	<u>2/Month</u>	<u>Grab</u>		<u>X</u>
Nitrogen, TKN (as N), mg/l				
() Nitrogen, Ammonia (as N), mg/l				
(x) pH, SU (standard units)	<u>2/Month</u>	<u>Grab</u>		<u>X</u>
Solids, Settleable, ml/l	<u>2/Month</u>	<u>Grab</u>		<u>X</u>
Chlorine, Total Residual, mg/l ⁽³⁾	<u>2/Month</u>	<u>Grab</u>		<u>X</u>
Phosphorus, Total (as P), mg/l				
() Temperature, Deg. F				

NOTES: ⁽¹⁾ and effluent value shall not exceed _____ % of influent values.⁽²⁾ Ultimate Oxygen Demand shall be computed as follows:

$$UOD = 1.5 \times CBOD_5 + 4.5 \times TKN \text{ (Total Kjeldahl Nitrogen)}$$

⁽³⁾ Monitoring of these parameters is only required during the period when disinfection is required.⁽⁴⁾ Emergency discharge of fire foam from units 1 and 2 may be routed to this treatment plant for treatment.

* Sample shall be obtained prior to combination with roof drains and junction box sump.

ACTION LEVEL REQUIREMENTS (TYPE I)

The parameters listed below have been reported present in the discharge but at levels that currently do not require water quality or technology based limits. Action levels have been established which, if exceeded, will result in reconsideration or water quality or technology based limits.

Routine action level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If submission of DMR's is not required by this permit, the results shall be maintained in accordance with instructions on the RECORDING, REPORTING AND MONITORING page of this permit.

If any of the action levels is exceeded, the permittee shall undertake a short-term, high-intensity monitoring program for this parameter. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three operating days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the action level was first exceeded. Results may be appended to the DMR or transmitted under separate cover to the addresses listed on the RECORDING, REPORTING AND MONITORING page of this permit. If levels higher than the actions levels are confirmed the permit may be reopened by the Department for consideration of revised action levels or effluent limits.

The permittee is not authorized to discharge any of listed parameters at levels which may cause or contribute to a violation of water quality standards.

<u>Outfall Number & Effluent Parameter</u>	<u>Action Level</u>	<u>Units</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>	<u>Minimum Monitoring Requirements</u>
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(1)007 - Floor and Equipment Drains

Zinc	0.2	mg/l	Quarterly	Grab	delete Modification Item # 10 12
Barium	1.5	mg/l	Quarterly	Grab	
Manganese	1.0	mg/l	Quarterly	Grab	

(1)020 - Storm Water Drainage

Zinc	0.45	mg/l	Quarterly	Grab	delete Modification Item # 10 12
Aluminum	0.5	mg/l	Quarterly	Grab	

040 - Cooling Tower Blowdown and Service Water (Unit 2)

Iron	1.0	mg/l	Quarterly	Grab
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011 & 041 - Units #1 and #2 Wastewater

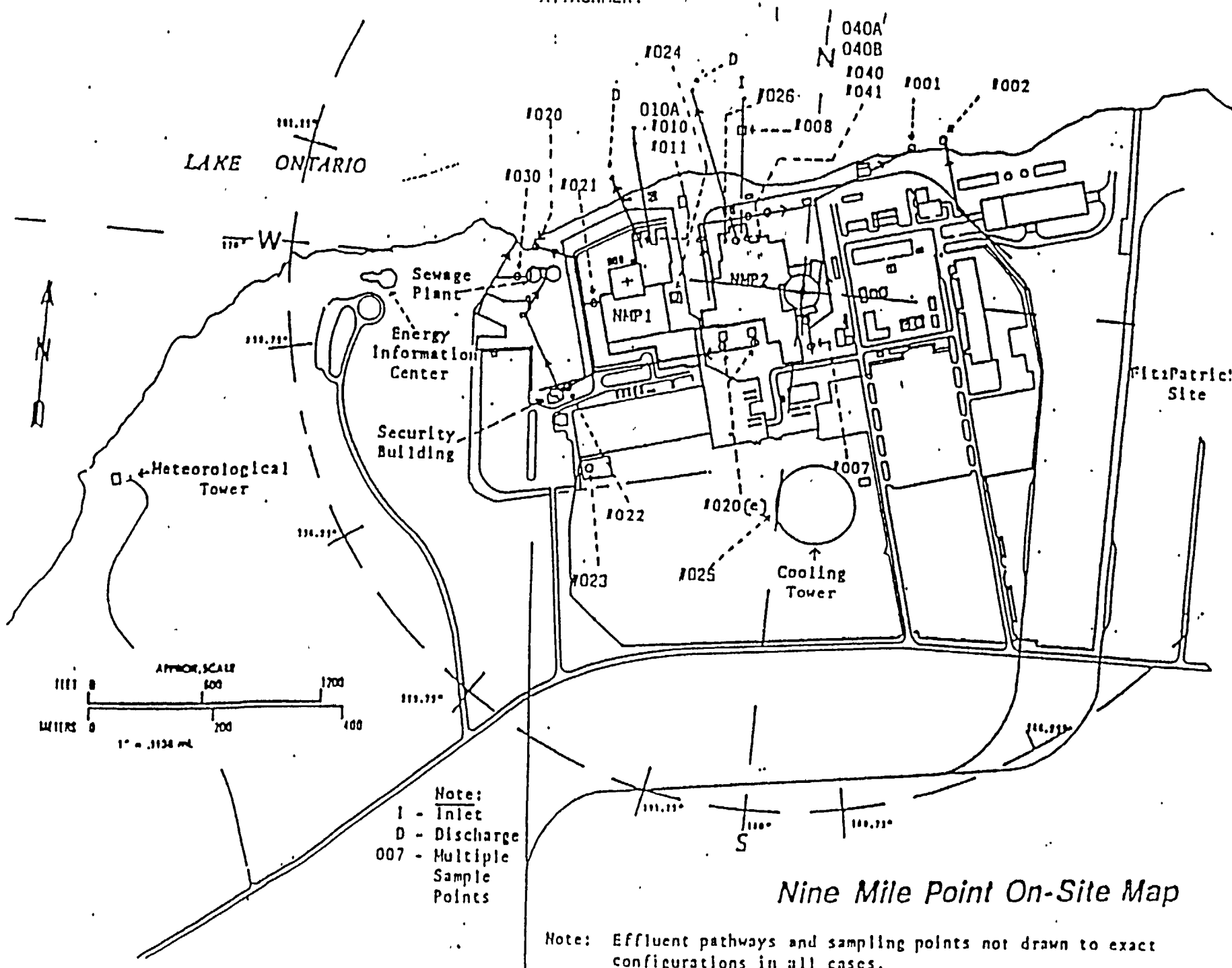
Phenolics	1.0	mg/l	Quarterly	Grab	delete Modification Item # 10 12
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NOTE:

1. Since flow for outfall 007 ^{delete} and 020 are difficult to determine, mass limits are not required for these outfalls.

Modification
Item # 10 12

ATTACHMENT



Nine Mile Point On-Site Map

Note: Effluent pathways and sampling points not drawn to exact configurations in all cases.

Modification Date: 11/24/98

*delete***DEFINITIONS OF DAILY AVERAGE AND DAILY MAXIMUM**

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when measurements were made.

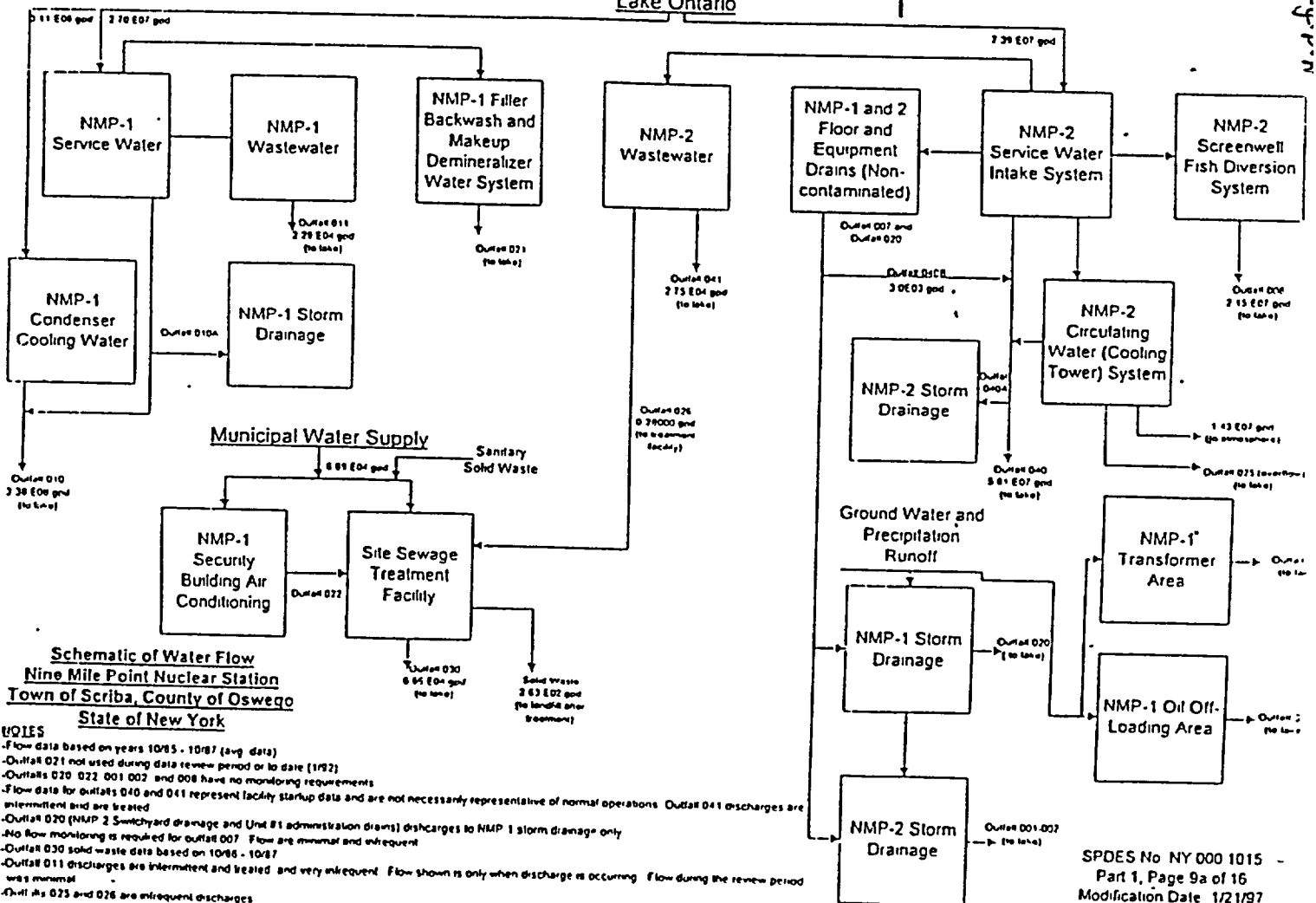
The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) indicated below: (Show sampling locations and outfalls with sketch or flow diagram as appropriate)

ATTACHMENT 2
Nine Mile Point Nuclear Station
Niagara Mohawk Power Corporation
Permit # NY 000 1015
Lake Ontario

*Replace with
new flow chart
[Attachment 10]*



ADDITIONAL REQUIREMENTS:**I. The following requirements are applicable to Units #1 and #2**

1. There shall be no discharge of "PCBs" from this facility.
2. In regard to general conditions #11.5, items c and d shall be reported semi-annually to NYSDEC offices in Cortland and Albany.
3. There shall be no discharge of boiler chemical cleaning compounds, metal cleaning wastewater, or boiler blowdown from this facility.
4. Radioactivity

Concentrations of Radioactivity in effluent are subject to the requirements of the U.S. Nuclear Regulatory Commission License Conditions.

5. ~~NMPNS~~
~~Niagara Mohawk~~ shall notify the Department within one week from the time of submission to the Nuclear Regulatory Commission of any requested changes to the Environmental Protection Plan requirements which could in any way affect the requirements of this permit.
6. ~~NMPNS~~
~~Niagara Mohawk~~ shall also submit concurrently to the Department any water-related report on the environment it submits to any federal, state, or local agency.
7. The permittee shall provide access to the site at any time to representatives of DEC to assess the environmental impact of its operation of the facility and to review any sampling program methodology, and the gathering and the reporting of any data.
8. No biocides, slimicides, or corrosion control chemicals are authorized for use other than those specifically authorized under this permit. Prior Department approval is required for any additional use of these chemicals as well as for the use of any new water treatment chemicals.
9. The water temperature at the surface of Lake Ontario shall not be raised more than three Fahrenheit degrees over the temperature that existed before the addition of heat of artificial origin except in a mixing zone consisting of an area of 425 acres from the point of discharge, this temperature may be exceeded.

II. The following requirements are applicable to Unit #2

No discharge from this facility shall cause violation of the New York State Department of Health regulations contained in 10 NYCRR Part 170 at the source of intake of any water supply used for drinking, culinary or food processing purposes.

Mod. Section Item # 26

III. Biological Monitoring and Related Matters

1. Previous Biological Monitoring Data - by EDP + 3 months, the permittee shall file with the Chief, Bureau of Environmental Protection in Albany; Fishery Section Head, Cape Vincent Fisheries Station, and with the Regional Supervisor of Natural Resources in Cortland, a report containing and/or identifying all previous reports which contain biological data relating to the ecological effects of plant operation from March 31, 1975 to the present. Previously submitted reports need not be duplicated, but title, date, and data locations must be completely identified. A copy of all unsubmitted reports and data will be sent to the above offices by EDP + 3 months. Data to be reported should include, but are not necessarily limited to, cooling water flows, dates, times, available operating and meteorological conditions, species, numbers impinged and/or entrained and other available biological information.
2. Impingement and Entrainment Abundance Studies
 - a. Impingement abundance studies, including collection efficiencies, shall be conducted at Unit 1. An entrainment abundance study shall be conducted at Unit 1.
 - b. By EDP + 6 months, an impingement and entrainment abundance study plan, of one year duration, to determine the abundance of impinged and entrained aquatic organisms at Unit 1, shall be submitted for approval to the offices listed in III.1 above.
 - c. Studies identified in the approved plan shall begin by EDP + 24 months.
 - d. A six month data summary shall be submitted by EDP + 32 months.
3. Intensity of Sampling and Protocols for Viability, Impingement and Entrainment Abundance Studies
 - a. Study plans required to be submitted for DEC approval should be comparable to previous studies and should consider improvement opportunities, as applicable, provided by protocols established in the document "Dunkirk Station Biological Studies Standard Operating Procedures 1987", prepared for Niagara Mohawk Power Corporation, January 1987, by Beak Consultants, except as modified by the following documents:
 1. January 8, 1987, Richard Koeppicus (DEC) to David Rengert (NiMo) Re: Dunkirk Biological Studies Standard Operating Procedure.
 2. February 13, 1987, Richard Koeppicus (DEC) to David Rengert (NiMo) Re: Condition for Dunkirk Steam Station Standard Operating Procedure.
 3. March 23, 1987, Richard Koeppicus (DEC) to David Rengert (NiMo) Re: Changes to Impingement Viability Studies.
 4. April 22, 1987, David Rengert (NiMo) to Richard Koeppicus (DEC) Re: Dunkirk Steam Station Biological Monitoring Studies.

- b. The species of concern for detailed studies are white perch, smallmouth bass, yellow perch, alewife, rainbow smelt, white bass and all members of the salmonidae.
- c. Additional Requirement III.3.a. is for guideline purposes only. It is to be used as a basis in developing the study plan of Additional Requirement III.2.a.. The permittee must abide by the study plans developed by the permittee and approved by DEC which define the intensity and protocols for sampling.

4. Reporting of Entrainment and Impingement Studies

- a. A final report incorporating all the biological studies, including procedures, manner of compiling, tests, results, etc. shall be submitted to DEC by EDP + 40 months.
- b. The report shall contain a section which shall indicate the pertinent plant operating data on the days that biological monitoring collections are made and should include, but are not necessarily limited to, the units operating, intake and discharge temperatures, quantity of circulating water, number of pumps operational, amount of recirculation, generation, number of traveling screens operational, etc.
- c. The final report should be concise and rely heavily on graphic or tabular data. As applicable, it should be of similar content, format and quality as the report "Dunkirk Station Biological Studies SPDES Permit No. NY0002321, Final Report, January - December 1987".

5. Report Identification

All required submittals on Biological Monitoring and Related Matters shall be sent to the DEC offices identified in III.1 above, and shall contain the following information on the cover page:

- a. Name of facility and units to which the report pertains.
- b. Permit number.
- c. Permit condition number(s) which the report is to satisfy.
- d. Title of study.
- e. Date.

6. Reduction in Circulating Water Flow Evaluation of Units 1 and 2

The permittee shall evaluate the use of reduced circulating cooling water flow during cool or cold weather periods or under reduced station loads. A report shall be submitted to DEC by EDP + 1 year which identifies any benefits or harm to aquatic organisms from reduced circulating cooling water pump operation and whether such reduced operation of pumps (or variable speed pumps) is feasible for operating the facility.

- 7. The permittee shall submit written notification, which shall include detailed descriptions and appropriate figures, to the Department of Environmental Conservation, to the Chief, Bureau of Environmental Protection, Regional Supervisor for Natural Resources and Regional Engineer at least 60 days in advance of any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structures. The permittee shall submit, with its written notification, a demonstration that the change reflects the best technology currently available for minimizing adverse environmental impact. Prior DEC approval is required before initiating such change.

8. All measurements shall use the metric system; except that BTU and degrees Fahrenheit for the thermal survey are acceptable.
9. Copies of all reports and/or studies regarding water and biological parameters related to intake and discharge conditions, or its effects on aquatic organisms, whether generated for this permit or otherwise, shall be sent to DEC offices listed in III.1 above.
10. Biological specimens may be required to be submitted to DEC upon request.
11.
 - a. Electrical output and operation of the condenser cooling water system, including intake and discharge temperature and total flows shall be recorded on a daily basis, as specified in b., below. The appropriate portions of this data set shall be reported with any biological monitoring requirement to be reported where plant operating parameters are essential to understanding the biological impacts of the facility.
 - b. The permittee shall collect and maintain at the station, the following information:
 1. Daily minimum, average, and maximum station electrical output shall be determined and logged.
 2. Daily minimum, average and maximum water use shall be directly or indirectly calculated or logged.
 3. Daily minimum, average, maximum, intake and discharge temperatures shall be logged.
 4. Measurements in 1, 2, and 3 shall be taken on an hourly basis.
 - c. The data in b. above, shall be available for the DEC's inspection at any time and shall be submitted to the DEC within one month of the receipt of a DEC request to do so.
 - d. The data in b. above shall be submitted within 60 days of the end of each calendar year.
12. Chlorine use for once-through systems shall be limited to two hours per unit per day. The treatments may include approved oxidants, i.e. bromine, chlorine, etc.

SPECIAL CONDITIONS - BEST MANAGEMENT PRACTICES

1. The permittee shall develop and implement a Best Management Practices (BMP) plan, within one year of EDP to prevent, or minimize the potential for, release of significant amounts of toxic or hazardous pollutants to the waters of the State through plant site runoff, spillage and leaks; sludge or waste disposal; or drainage from raw material storage. If a plan exists, a letter indicating that all requirements addressed in this section must be submitted to this Department within one year of EDP.
2. The permittee shall review all facility components or systems (including material storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; and sludge and waste disposal areas) where toxic or hazardous pollutants are used, manufactured, stored or handled to evaluate the potential for the release of significant amounts of such pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. For hazardous pollutants, the list of reportable quantities as defined in 40 CFR, Part 117 may be used as a guide in determining significant amounts of releases. For toxic pollutants, the relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

The review shall address all substances present at the facility that are listed as toxic pollutants under Section 307(a)(1) of the Clean Water Act or as hazardous pollutants under Section 311 of the Act or that are identified as Chemicals of Concern by the Industrial Chemical Survey.

3. Whenever the potential for a significant release of toxic or hazardous pollutants to State waters is determined to be present, the permittee shall identify Best Management Practices that have been established to minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider typical industry practices such as spill reporting procedures, risk identification and assessment, employee training, inspections and records, preventive maintenance, good housekeeping, materials compatibility and security. In addition, the permittee may consider structural measures (such as secondary containment devices) where appropriate.
4. Development of the BMP plan shall include sampling of waste stream segments for the purpose of toxic "hot spot" identification. The economic achievability of technology-based end-of-pipe treatment will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology.
5. The BMP plan shall be documented in narrative form and shall include any necessary plot plans, drawings or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the BMP plan shall be maintained at the facility and shall be available to authorized Department representatives upon request. As a minimum, the plan shall include the following BMP's:

<ol style="list-style-type: none"> a. BMP Committee b. Reporting of BMP Incidents c. Risk Identification and Assessment d. Employee Training e. Inspections and Records 	<ol style="list-style-type: none"> f. Preventive Maintenance g. Good Housekeeping h. Materials Compatibility i. Security
--	--
6. The BMP plan shall be modified whenever changes at the facility materially increase the potential for significant releases of toxic or hazardous pollutants or where actual releases indicate the plan is inadequate

A "hot spot" is a segment of an industrial facility; including but not limited to soil, equipment, material storage areas, sewer lines etc ; which contributes elevated levels of problem pollutants to the wastewater and/or storm water collection system of that facility. For the purposes of this definition, problem pollutants are substances for which end of pipe treatment to meet a water quality or technology requirement may, considering the results of wastestream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is adequately higher than the end of pipe concentration of that same pollutant so as to allow for an economically justify removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also;**
- ☒ (if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

Send the original (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Watershed Compliance Programs
~~50 Wolf Road~~ 625 Broadway
Albany, New York 12233-3506
Phone: (518) ~~457-3790~~ 402-8154

Oswego County Dept. of Health
70 Bunner Street
Oswego, New York 13126

Send the first copy (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer - Region 7
615 Erie Boulevard - West
Syracuse, New York 13204-2400

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the [] Regional Water Engineer and/or [] County Health Department or Environmental Control Agency listed above.
- d) **Noncompliance** with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II)
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.
- g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

Modification Item 26

Attachment 3

Proposed Permit Footnote Amendments and Additions

Proposed Permit Footnote Amendments and Additions
SPDES Permit No. NY 000 1015
September 2002

Amended Footnotes

- a. 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 envelope 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 exceedence 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 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 (15) 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 year.

- g. Total copper samples should be obtained from the CWS blowdown line or the cooling tower basin. The total copper concentration for Outfall 040 will be based on a calculated value taking into consideration the flow from the service water system. The equation and parameters for performing this calculation are as follows:

Total copper concentration at Outfall 040 =

$$\frac{[\text{CWS}]_{\text{Cu}} \times \text{CWS Blowdown Flow}}{\text{Total Flow for Outfall 040}} + \frac{[\text{CWS}]_{\text{Cu}} \times \text{Tempering Flow}}{\text{Total Flow for Outfall 040}}$$

**Proposed Permit Footnote Amendments and Additions
SPDES Permit No. NY 000 1015
September 2002**

g. (Continued)

Where:

[CWS]_{Cu} = Copper concentration of Circulating Water System (CWS) Blowdown

Total Flow for Outfall 040 = CWS Blowdown Flow & Service Water Discharge Flow

Tempering Flow = The amount of service water (discharge effluent) used to temper the service water influent during winter months

- o. Discharge allowed when Inhibitor AZ8104 concentration is 8.8 mg/l or less (whole product) and CUPROSTAT PF concentration is at 19.5 mg/l or less (whole product).

New Footnotes

- q. Permit outfalls with this designation include the discharge of uncontaminated precipitation storm water and/or groundwater from containment systems and other similar structures to the surrounding grounds, including stoned areas. Contaminated water from said structures will be managed per NMPNS spill procedures, the Spill Prevention Report (SPR) and the Spill Prevention, Control and Countermeasure (SPCC) plan.
- r. Outfall 040A has two contributing sources, each originating from an individual sump located in the Circulating Water Pump pits.
- s. Calculated flows are based on the "Adams Strainer" pressure reading, which is indicative of lake level. Weekend/holiday calculated flows are based on the "Adams Strainer" pressure reading from the previous surveillance. Calculated flows for Monday through Friday are based on the respective lake level for the calculation date.
- t. The use of barley straw for pH control in the Unit 1 Oil Retention Basin is acceptable.
- u. Decay Heat Cooling Tower Blowdown discharges into Outfall 040. Total Residual Chlorine is monitored at the discharge of Outfall 040.

Attachment 4

Chemical Use Request for Inhibitor AZ8104 and CUPROSTAT PF

Richard B. Abbott
Vice President
Nuclear Engineering

August 30, 2001
NMPE 0279

Phone: 315.349.1812
Fax: 315.349.4417

Mr. Paul Kolakowski, P.E.
New York State Department of
Environmental Conservation
625 Broadway 4th Floor
Albany, NY 12233-3506

Subject: *Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
New York State State Pollutant Discharge Elimination
System Permit Number NY 000 1015
Chemical Usage Request for INHIBITOR AZ8104 and CUPROSTAT PF*

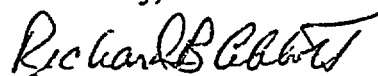
Dear Mr. Kolakowski:

Pursuant to Part 1, page 12 of 17, of Additional Requirements I.8 of the State Pollutant Discharge Elimination System (SPDES) Permit Number NY 000 1015, please find attached (Attachment 1) the Water Treatment Chemical Usage Notification Requirements for SPDES Permittees for CUPROSTAT PF a Calgon product and INHIBITOR AZ8104 a BetzDearborn product. The Nine Mile Point Nuclear Station (NMPNS) wishes to use these products as a copper inhibitor at Unit 2.

Currently, Unit 2 utilizes INHIBITOR AZ8103 as the inhibitor, but this product is no longer available for use. The two above mentioned products are NMPNS's selection as copper inhibitors for Unit 2. Also, attached (Attachment 2) are the Material Safety Data Sheets for these products.

Your timely review and approval of these chemical use requests is appreciated. NMPNS requests that the approval for use be given by *October 5, 2001* to allow for uninterrupted power generation and compliance with the Unit 2 SPDES permit requirements. Should you have any questions pertaining to this subject matter, please feel free to contact Mr. Kent E. Stoffle at (315) 349-1364.

Sincerely,



Richard B. Abbott
Vice President Nuclear Engineering

RBA/KES/mlg
Attachment

cc: Mr. William McCarthy, NYS DEC
Ms. Joanne March, NYS DEC
Records Management

Page 2
NMPE 0279

bcc: W. Holzhauer
M. McPeck
R. Cummings

ATTACHMENT 1

NYSDEC - Division of Water

Water Treatment Chemical (WTC) Usage Notification Requirements for SPDES Permittees

Instructions Page

Purpose

New or increased use of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use. The DEC will review that submittal and determine if a formal SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. **The majority of WTC authorizations do not require formal SPDES permit modification.** Notification requirements are summarized below to ensure the submission of complete information. WTCs which are used in closed systems and cannot be discharged or those which are discharged to municipal STP do not require DEC review. Examples of WTCs include, biocides, coagulants, conditioners, corrosion inhibitors, defoamers, flocculants, scale inhibitors, sequestrants, and settling aids. DEC staff may also direct you to use this form for review and authorization of substances other than WTCs, e.g. process chemicals.

Notification Requirements/Instructions

For each new or increased use of a WTC please complete items 1a, and 2 - 13 on the attached 3 page form, entitled **Water Treatment Chemical Usage Notification Requirements for SPDES Permittees**, attach a copy of the product label and Fax or Mail the information to:

Permit writer: Paul Kolakowski	Telephone: (518) 402-8104	Fax: (315) 402-9029
Address: 625 Broadway, Albany, NY 12233-3506		

Alternatively, the permittee may, at a minimum, complete items 1a, 2 - 8 and 13 then forward the form to the WTC manufacturer who must then complete the remaining items (9 - 12) and items 1b and 14. The manufacturer must then send the completed form directly to the permit writer. This alternative method may be necessary because the WTC manufacturer may be reluctant to reveal trade secret product formulations to the permittee.¹

For completion of item 12 (Toxicity Info) please assure that the tests were conducted in accordance with the EPA Toxicity Manual and that the results are for the appropriate receiving water (i.e. fresh water or salt water).² In general, submissions which do not include any toxicity information will not be authorized. Submissions containing incomplete toxicity information will be reviewed using conservative safety factors which may prevent authorization or result in the permit being modified to include routine effluent toxicity testing.

The permittee must demonstrate that the use and discharge of any WTCs containing **phosphorus**, tributary to the Great Lakes Basin or other ponded waters, is necessary and that no acceptable alternatives exist. Please note that in some cases your permit may require modification to regulate phosphorus.

After reviewing the submittal the permit writer will complete items 15 and 16 and fax or mail a copy of the completed form to the person identified in item 2.c.

Common Reasons Which Prevent Letter Authorization of a WTC

- Submission of incomplete or inaccurate information.
- High WTC toxicity compared to available receiving stream dilution or predicted exceedance of AWQC.
- Department review indicates that a SPDES permit modification is necessary.

Footnotes:

- (1) If requested, the Department will restrict access to trade secret information to the extent authorized by law.
- (2) Submission of both acute (48 or 96 hour LC50 or EC50) and chronic (NOEC) test results for at least one vertebrate and one invertebrate species are required. Refer to the following three manuals: EPA/600/4-90/027F (1993); EPA/600/4-91/002 (1994); EPA/600/4-91/003 (1994); or their replacements.

NYSDEC - Division of Water

Water Treatment Chemical (WTC) Usage Notification Requirements for SPDES Permittees

Page 1 of 3

Permittee completes items 1a and 2 - 13. Alternatively, the permittee may complete items 1a, 2 - 8 and 13 if the WTC manufacturer completes items 1b, 9 - 12 and 14. See instructions.

1.a. Date Signed by Permittee : 8/24/01		1.b. Date Signed by WTC Manufacturer : 8/3/01	
2.a. Permittee Name : Niagara Mohawk Power Corp.		2.b. SPDES No. : NY 000 1015	
2.c. Contact Name : Kent E. Stoffle			
3.a. WTC Name : CUPROSTAT PF			
3.b. WTC Manufacturer : ONDEONALCO			
4. WTC Function : Copper Inhibitor			
5. Affected Outfall(s) : 040			
6.a. WTC Avg/Max Daily Dosage : 3,336 - 5,004 Pounds (slug-feed)			lbs/day
6.b. Dosage Frequency : Approx. 2/year			
7.a. Outfall Avg/Max WTC Concentration :			/ 19.5* mg/l
7.b. Outfall Avg/Max Flow Rate :			/ 72 MGD
8. List measures in place to ensure that excessive levels of WTC are not used and subsequently discharged: <ol style="list-style-type: none"> 1. Full time process application monitoring by professional operators. 2. Chemical feed system. 3. System will be isolated during chemical application. 4. Once treatment has been completed, blowdown will be established to ensure CUPROSTAT PF concentrations in the outfall are maintained below 19.5 mg/l whole product. 			
9.a. WTC Composition - Ingredients/Impurities	9.b. %	9.c. CAS#	9.d. Outfall Concentration
Sodium tolyltriazole	5	64665-57-2	0.98 mg/l
Sodium 5-pentoxymbenzotriazole	5	133145-29-6	0.98 mg/l
			mg/l
			mg/l
			mg/l
			mg/l
			mg/l
9.e. Known Degradation Products :			
10.a. Is WTC a NYS registered biocide? No		10.b. Registration Number :	
11. WTC BOD and COD (lb/lb) : N/A			

* Considering the plant discharge diffuser at the outfall, the average and maximum daily discharge concentrations would be future diluted by a factor of 5.9.

NYSDEC - Division of Water
WTC Usage Notification Requirements for SPDES Permittees
Page 2 of 3

1.a. Date Signed by Permittee : 8/24/01			1.b. Date Signed by WTC Manufacturer : 8/3/01		
2.b. SPDES No. : NY 000 1015			3.a. WTC Name : CUPROSTAT PF		
12. WTC Toxicity Info (most sensitive species) - Attach description of endpoint for each EC50 and LOEC.					
12.a. Vertebrate Species	96 hr. LC50	EC50	NOEC	LOEC	Other -
Fathead Minnow	33.9 mg/l	mg/l	mg/l	mg/l	
12.b. Vertebrate Species	48 hr. LC50	EC50	NOEC	LOEC	Other -
Silverside	51.3 mg/l	mg/l	mg/l	mg/l	
12.c. Invertebrate Species	48 hr. LC50	EC50	NOEC	LOEC	Other -
Daphnia Magna	59.5 mg/l	mg/l	mg/l	mg/l	
12.d. Invertebrate Species	48 hr. LC50	EC50	NOEC	LOEC	Other -
Mysid Shrimp	45.4 mg/l	mg/l	mg/l	mg/l	
12.e. Vertebrate Species	48 hr. LC50	EC50	NOEC	LOEC	Other -
Sheepshead Minnow	91.5 mg/l	mg/l	mg/l	mg/l	

13. Permittee Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete. The generic WTC usage requirements noted below will be adhered to.

PRINT NAME KENT E. STOFFLE SIGNATURE 

TITLE/COMPANY Environmental Protection Supervisor / Niagara Mohawk Power Corp.

TELEPHONE (315) 349-1364 FAX (315) 349-1400

14. WTC Manufacturer Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete.

PRINT NAME DOUG CALVEY SIGNATURE 

TITLE/COMPANY Senior Sales Engineer / ONDEONALCO

TELEPHONE (578) 899-2434 FAX (578) 899-2868

NYSDEC - Division of Water
WTC Usage Notification Requirements for SPDES Permittees
 Page 3 of 3

1.a. Date Signed by Permittee : 8/24/01	1.b. Date Signed by WTC Manufacturer : 8/3/01
2.b. SPDES No. : NY 000 1015	2.c. Contact Name : Kent E. Stoffle
3.a.. WTC Name : CUPROSTAT PF	6.a. Avg./Max Daily Dosage: 3336-5004* lbs/d

* Application Frequency 2 x year.

Generic WTC Usage Requirements

- A. WTC usage shall not exceed the usage rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. **The permittee must maintain a logbook** of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

Items 15 - 16 must be completed by NYSDEC permit writer.

15. Review Decision (check the appropriate box).

☐

The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

☐

The proposed WTC usage may not proceed for one of the following three reasons:

☐

As noted below, the information provided is insufficient to complete our review.

☐

As noted below, the SPDES permit must first be modified to add new requirements.

☐

As noted below, the proposed use is prohibited.

16. Permit Writer Information:

PRINT NAME _____ SIGNATURE _____

TITLE _____ DATE _____

ADDRESS _____

TELEPHONE _____ FAX _____

NYSDEC - Division of Water

Water Treatment Chemical (WTC) Usage Notification Requirements for SPDES Permittees

Instructions Page

Purpose

New or increased use of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use. The DEC will review that submittal and determine if a formal SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. **The majority of WTC authorizations do not require formal SPDES permit modification.** Notification requirements are summarized below to ensure the submission of complete information. WTCs which are used in closed systems and cannot be discharged or those which are discharged to municipal STP do not require DEC review. Examples of WTCs include, biocides, coagulants, conditioners, corrosion inhibitors, defoamers, flocculants, scale inhibitors, sequestrants, and settling aids. DEC staff may also direct you to use this form for review and authorization of substances other than WTCs, e.g. process chemicals.

Notification Requirements/Instructions

For each new or increased use of a WTC please complete items 1a, and 2 - 13 on the attached 3 page form, entitled **Water Treatment Chemical Usage Notification Requirements for SPDES Permittees**, attach a copy of the product label and Fax or Mail the information to:

Permit writer: Paul Kolakowski	Telephone: (518) 402-8104	Fax: (518) 402-9029
Address: 625 Broadway, Albany, NY 12233-3506		

Alternatively, the permittee may, at a minimum, complete items 1a, 2 - 8 and 13 then forward the form to the WTC manufacturer who must then complete the remaining items (9 - 12) and items 1b and 14. The manufacturer must then send the completed form directly to the permit writer. This alternative method may be necessary because the WTC manufacturer may be reluctant to reveal trade secret product formulations to the permittee.¹

For completion of item 12 (Toxicity Info) please assure that the tests were conducted in accordance with the EPA Toxicity Manual and that the results are for the appropriate receiving water (i.e. fresh water or salt water).² In general, submissions which do not include any toxicity information will not be authorized. Submissions containing incomplete toxicity information will be reviewed using conservative safety factors which may prevent authorization or result in the permit being modified to include routine effluent toxicity testing.

The permittee must demonstrate that the use and discharge of any WTCs containing **phosphorus**, tributary to the Great Lakes Basin or other ponded waters, is necessary and that no acceptable alternatives exist. Please note that in some cases your permit may require modification to regulate phosphorus.

After reviewing the submittal the permit writer will complete items 15 and 16 and fax or mail a copy of the completed form to the person identified in item 2.c.

Common Reasons Which Prevent Letter Authorization of a WTC

- Submission of incomplete or inaccurate information.
- High WTC toxicity compared to available receiving stream dilution or predicted exceedance of AWQC.
- Department review indicates that a SPDES permit modification is necessary.

Footnotes:

- (1) If requested, the Department will restrict access to trade secret information to the extent authorized by law.
- (2) Submission of both acute (48 or 96 hour LC50 or EC50) and chronic (NOEC) test results for at least one vertebrate and one invertebrate species are required. Refer to the following three manuals: EPA/600/4-90/027F (1993); EPA/600/4-91/002 (1994); EPA/600/4-91/003 (1994); or their replacements.

NYSDEC - Division of Water

Water Treatment Chemical (WTC) Usage Notification Requirements for SPDES Permittees

Page 1 of 3

Permittee completes items 1a and 2 - 13. Alternatively, the permittee may complete items 1a, 2 - 8 and 13 if the WTC manufacturer completes items 1b, 9 - 12 and 14. See instructions.

1.a. Date Signed by Permittee : 8/24/01		1.b. Date Signed by WTC Manufacturer : 8/3/01	
2.a. Permittee Name : Niagara Mohawk Power Corp.		2.b. SPDES No. : NY 000.1015	
2.c. Contact Name : Kent E. Stoffle			
3.a. WTC Name : Inhibitor AZ8104			
3.b. WTC Manufacturer : BetzDear born			
4. WTC Function : Copper Inhibitor			
5. Affected Outfall(s) : 040			
6.a. WTC Avg/Max Daily Dosage :		2000/3000 (slug feed) lbs/day	
6.b. Dosage Frequency :		Approx. 12/year	
7.a. Outfall Avg/Max WTC Concentration :		/ 8.8* mg/l	
7.b. Outfall Avg/Max Flow Rate :		/ 72 MGD	
8. List measures in place to ensure that excessive levels of WTC are not used and subsequently discharged: <ol style="list-style-type: none"> 1. Full time process application monitoring by professional operators. 2. Chemical feed system. 3. System will be isolated during chemical application. 4. Once treatment has been completed, blowdown will be established to ensure Inhibitor AZ8104 concentrations in the outfall are maintained below 8.8 mg/l whole product. 			
9.a. WTC Composition - Ingredients/Impurities	9.b. %	9.c. CAS#	9.d. Outfall Concentration
Chlorotolyltriazole Sodium Salt	13.1	202420-04-0	1.15 mg/l
Dichlorotolyltriazole	2.9		0.26 mg/l
Benzotriazole, Methyl, Sodium Salt	1.4	64665-57-2	0.12 mg/l
Sodium Hydroxide	0.6	1310-73-2	0.05 mg/l
Sodium Chloride	5.8	7647-14-5	0.51 mg/l
Water	76.2	7732-18-5	6.70 mg/l
			mg/l
9.e. Known Degradation Products :			
10.a. Is WTC a NYS registered biocide? No		10.b. Registration Number :	
11. WTC BOD and COD (lb/lb) : N/A			

* Considering the plant discharge diffuser at the outfall, the average and maximum daily discharge concentrations would be future diluted by a factor 5.9.

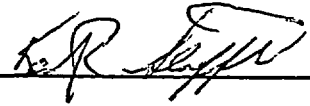
NYSDEC - Division of Water

WTC Usage Notification Requirements for SPDES Permittees

Page 2 of 3

1.a. Date Signed by Permittee : 8/24/01			1.b. Date Signed by WTC Manufacturer : 8/3/2001		
2.b. SPDES No. : NY 000 1015			3.a. WTC Name : Inhibitor AZ8104		
12. WTC Toxicity Info (most sensitive species) – Attach description of endpoint for each EC50 and LOEC.					
12.a. Vertebrate Species	LC50	EC50	NOEC	LOEC	No Effect Level
Fathead Minnow	50.7 mg/l	mg/l	mg/l	mg/l	21.8 mg/l
12.b. Vertebrate Species	LC50	EC50	NOEC	LOEC	No Effect Level
Rainbow Trout	15.4 mg/l	mg/l	mg/l	mg/l	6.3 mg/l
12.c. Invertebrate Species	LC50	EC50	NOEC	LOEC	No Effect Level
Daphnia Magna	217. mg/l	mg/l	mg/l	mg/l	148. mg/l
12.d. Invertebrate Species	LC50	EC50	NOEC	LOEC	No Effect Level
Mysid Shrimp	53. mg/l	mg/l	mg/l	mg/l	25. mg/l
12.e. Species	LC50	EC50	NOEC	LOEC	No Effect Level
Sheepshead Minnow	132. mg/l	mg/l	mg/l	mg/l	100. mg/l

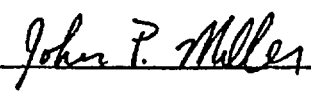
13. Permittee Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete. The generic WTC usage requirements noted below will be adhered to.

PRINT NAME Kent E. Stoffle SIGNATURE 

TITLE/COMPANY Environmental Protection Supervisor / Niagara Mohawk Power Corp.

TELEPHONE (315) 349-1364 FAX (315) 349-1400

14. WTC Manufacturer Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete.

PRINT NAME John P. Miller SIGNATURE 

TITLE/COMPANY Account Manager / BetzDearborn

TELEPHONE 315-391-5290 FAX 315-673-2803

NYSDEC - Division of Water
WTC Usage Notification Requirements for SPDES Permittees
 Page 3 of 3

1.a. Date Signed by Permittee : 8/24/01	1.b. Date Signed by WTC Manufacturer : 8/3/01
2.b. SPDES No. : NY 000 1015	2.c. Contact Name : Kent E. Stoffle
3.a.. WTC Name : Inhibitor AZ8104	6.a. Avg./Max Daily Dosage: 2000/3000* lbs/d

* Application Frequency 12 x year.

Generic WTC Usage Requirements

- A. WTC usage shall not exceed the usage rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. **The permittee must maintain a logbook** of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

Items 15 - 16 must be completed by NYSDEC permit writer.

15. Review Decision (check the appropriate box).

☐

The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

☐

The proposed WTC usage may not proceed for one of the following three reasons:

☐

As noted below, the information provided is insufficient to complete our review.

☐

As noted below, the SPDES permit must first be modified to add new requirements.

☐

As noted below, the proposed use is prohibited.

16. Permit Writer Information:

PRINT NAME _____ SIGNATURE _____

TITLE _____ DATE _____

ADDRESS _____

TELEPHONE _____ FAX _____

Attachment 5

NYSDEC WTC Usage Notification – CUPROSTAT PF

FILE COPY

SEP-26-2001 WED 02:07 PM

FAX NO.

P. 07

Form WTCFX (9/99)

NYSDEC - Division of Water
WTC Usage Notification Requirements for SPDES Permittees
Page 3 of 3

1.a. Date Signed by Permittee : 8/24/01	1.b. Date Signed by WTC Manufacturer : 8/3/01
2.b. SPDES No. : NY 000 1015	2.c. Contact Name : Kent E. Stoffle
3.a. WTC Name : CUPROSTAT PF #	6.a. Avg./Max Daily Dosage: 3336-5004* lbs/d

* Application Frequency 2 x year.

Generic WTC Usage Requirements

- A. WTC usage shall not exceed the usage rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. The permittee must maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. The permittee shall provide an annual report, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

Items 15 - 16 must be completed by NYSDEC permit writer.

15. Review Decision (check the appropriate box).

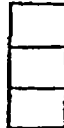


The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

NEED EOP DIL FACTOR 19.5/5.8 → OK



The proposed WTC usage may not proceed for one of the following three reasons:



As noted below, the information provided is insufficient to complete our review.

As noted below, the SPDES permit must first be modified to add new requirements.

As noted below, the proposed use is prohibited.

16. Permit Writer Information:

PRINT NAME PAUL KOLAKOWSKISIGNATURE Paul J. KolakowskiTITLE ENVIRONMENTAL ENG IIDATE 9/28/01ADDRESS 625 BROADWAY ALBANYTELEPHONE 518 462 8154 FAX _____

Attachment 6

NYSDEC WTC Usage Notification – Inhibitor AZ8104

page 7 of 7

FILE COPY

SEP-26-2001 WED 02:09 PM

FAX NO.

P. 11

Form WTCFV (9/99)

NYSDEC - Division of Water
WTC Usage Notification Requirements for SPDES Permittees
Page 3 of 3

1.a. Date Signed by Permittee: 8/24/01	1.b. Date Signed by WTC Manufacturer: 8/3/01
2.b. SPDES No.: NY 000 1015	2.c. Contact Name: Kent E. Stoffle
3.a. WTC Name: Inhibitor A28104	6.a. Avg/Max Daily Dosage: 2000/3000* lbs/d

* Application Frequency 12 x year.

Generic WTC Usage Requirements

- A. WTC usage shall not exceed the usage rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. The permittee must maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. The permittee shall provide an annual report, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

Items 15 - 16 must be completed by NYSDEC permit writer.

15. Review Decision (check the appropriate box).



The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above. *NRN EOP DILUTION FACTOR 8.8/5.9 OK*



The proposed WTC usage may not proceed for one of the following three reasons:



As noted below, the information provided is insufficient to complete our review.

As noted below, the SPDES permit must first be modified to add new requirements.

As noted below, the proposed use is prohibited.

16. Permit Writer Information:

PRINT NAME PAUL KOZAKOWSKI SIGNATURE Paul Kozakowski

TITLE ENVIRONMENTAL ENGINEER II DATE 9/24/01

ADDRESS 625 BRADDOCK AVE ALBANY

TELEPHONE 518-462-8104 FAX _____

Attachment 7

DMR Mark Up for Outfall 041

PERMITTEE NAME/ADDRESS (Include Facility Name/Location /D/From)

NAME NIAG MOHAWK POWER CORP
ADDRESS NINE MILE POINT NUCLEAR GENERA
348 LAKE ROAD
LYCOMING NY 13093
FACILITY NINE MILE POINT NUCLEAR GENERA
LOCATION LYCOMING NY 13093
ATTN: MS JANET MARSDEN

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

NY0001015
PERMIT NUMBER

041 M
DISCHARGE NUMBER

MAJOR
(SUHR 07)
F - FINAL
UNIT #2 WASTEWATER

MONITORING PERIOD

FROM YEAR MO DAY TO YEAR MO DAY
00 07 01 00 07 31

*** NO DISCHARGE ***
NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			Quality or Concentration				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
SPECIFIC CONDUCTANCE	SAMPLE MEASUREMENT	*****	*****		*****	0.67	0.70	(11)	0	ONCE/BATCH	GRAB
00095 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT DAILY AV	REPORT DAILY MX	UMHO/CM		CONTINUOUS	CORD
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		5.9	*****	7.3	(12)	0	ONCE/BATCH	GRAB
PH	PERMIT REQUIREMENT	*****	*****	****	4.0 MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/BATCH	GRAB
00400 U 0 0	SAMPLE MEASUREMENT	*****	*****		NODI 9	*****	NODI 9	(12)			
SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/BATCH	GRAB
PH	SAMPLE MEASUREMENT	*****	*****		NODI 9	*****	NODI 9	(19)			
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		ONCE/BATCH	GRAB
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	NODI 9	NODI 9	(19)			
SOLIDS, TOTAL SUSPENDED	PERMIT REQUIREMENT	*****	*****	****	*****	30 DAILY AV	50 DAILY MX	MG/L		ONCE/BATCH	GRAB
00530 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI 9	(19)			
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	MG/L		ONCE/BATCH	GRAB
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	*****		0	ONCE/MONTH	CALCTD
00556 1 0 0	PERMIT REQUIREMENT	*****	*****	****	*****	*****	*****	*****		ONCE/MONTH	CALCTD
EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	E0.023	E0.023	(03)	*****	*****	*****				
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	PERMIT REQUIREMENT	REPORT DAILY AV	REPORT DAILY MX	MGD	*****	*****	*****	****		ONCE/MONTH	CALCTD
00050 1 0 0	SAMPLE MEASUREMENT										
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

M. PECKHAM
NMP-2 PLANT MANAGER

TYPED OR PRINTED

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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 315 349-1364

DATE: 00 08 2r

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PH (00400 U 0 0) IS TO REPORT VALUES OBTAINED WHEN CONDUCTIVITY IS LESS THAN 10 MICROMHS. ENTER 'NODI 9' FOR THOSE PARAMETERS WHICH DO NOT APPLY TO THIS MONITORING PERIOD. FOR THOSE PARAMETERS WHICH DO NOT

APPLY TO THIS MONITORING PERIOD.
EPA Form 3320-1 (Rev 3/99) Previous editions may be used.

Attachment 8

1999-2002 Analytical Summary for Outfalls 007, 020 and 041

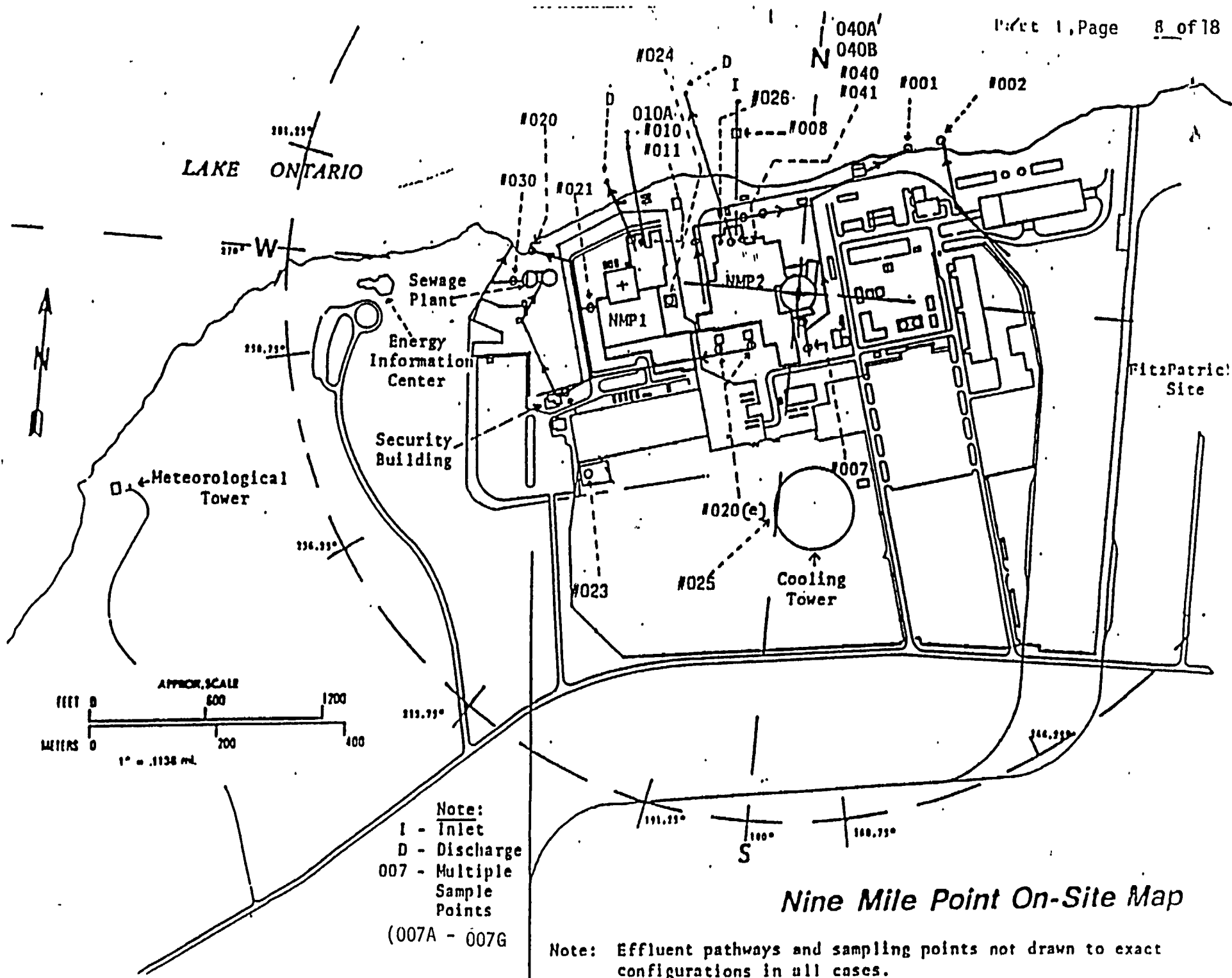
Nine Mile Point Nuclear Station
Summary of Outfall Analytical Data 1999 - 2002
SPDES Permit No. NY 000 1015

		Outfall 041	Outfall 020		Outfall 007	
		Phenolics	Aluminum	Zinc	Barium	Manganese
		Action limit=1.0 mg/l	Action limit=0.5 mg/l	Action limit=0.45 mg/l	Action limit=1.5 mg/l	Action limit=1.0 mg/l
Jan	1999	NA	NA	NA	<0.1	0.1
Feb	"	<0.1	0.3	<0.1	NA	NA
Mar	"	NA	NA	NA	NA	NA
Apr	"	<0.1	<0.2	<0.1	<0.1	<0.1
May	"	NA	NA	NA	NA	NA
Jun	"	NA	NA	NA	NA	NA
Jul	"	<0.1	NA	NA	0.1	<0.1
Aug	"	NA	<0.2	<0.1	NA	NA
Sep	"	NA	NA	NA	NA	NA
Oct	"	<0.005	<0.005	<0.005	0.073	0.13
Nov	"	NA	NA	NA	NA	NA
Dec	"	NA	NA	NA	NA	NA
Jan	2000	NA	0.017	0.044	0.11	0.009
Feb	"	<0.1	NA	NA	NA	NA
Mar	"	NA	NA	NA	NA	NA
Apr	"	<0.005	0.031	0.015	0.047	0.006
May	"	NA	NA	NA	NA	NA
Jun	"	NA	NA	NA	NA	NA
Jul	"	<0.005	0.012	0.017	0.0605	<0.005
Aug	"	NA	NA	NA	NA	NA
Sep	"	NA	NA	NA	NA	NA
Oct	"	0.004	0.037	0.0071	0.065	0.015
Nov	"	NA	NA	NA	NA	NA
Dec	"	NA	NA	NA	NA	NA
Jan	2001	NA	<0.005	0.008	0.042	<5
Feb	"	<0.1	NA	NA	NA	NA
Mar	"	NA	NA	NA	NA	NA
Apr	"	NA	0.24	0.032	<0.2	<0.01
May	"	0.005	NA	NA	NA	NA
Jun	"	NA	NA	NA	NA	NA
Jul	"	0.005	<0.1	0.02	<0.2	<0.1
Aug	"	NA	NA	NA	NA	NA
Sep	"	NA	NA	NA	NA	NA
Oct	"	<0.1	<0.1	0.019	<0.2	0.027
Nov	"	NA	NA	NA	NA	NA
Dec	"	NA	NA	NA	NA	NA
Jan	2002	NA	<0.1	0.039	<0.2	0.014
Feb	"	NA	NA	NA	NA	NA
Mar	"	0.005	NA	NA	NA	NA
Apr	"	<0.1	<0.01	0.013	<0.2	0.028
May	"	NA	NA	NA	NA	NA
Jun	"	NA	NA	NA	NA	NA
Jul	"	0.0037	<0.1	0.061	<0.2	0.022
Aug	"	NA	NA	NA	NA	NA
Sep	"	NA	NA	NA	NA	NA
Oct	"					
Nov	"					
Dec	"					

Note: Outfall 007 value is maximum value for 2DFM-Sump4, 2DFM-Sump2A, 2DFM-Sump2B, U1 Admin Sump and manholes

Attachment 9

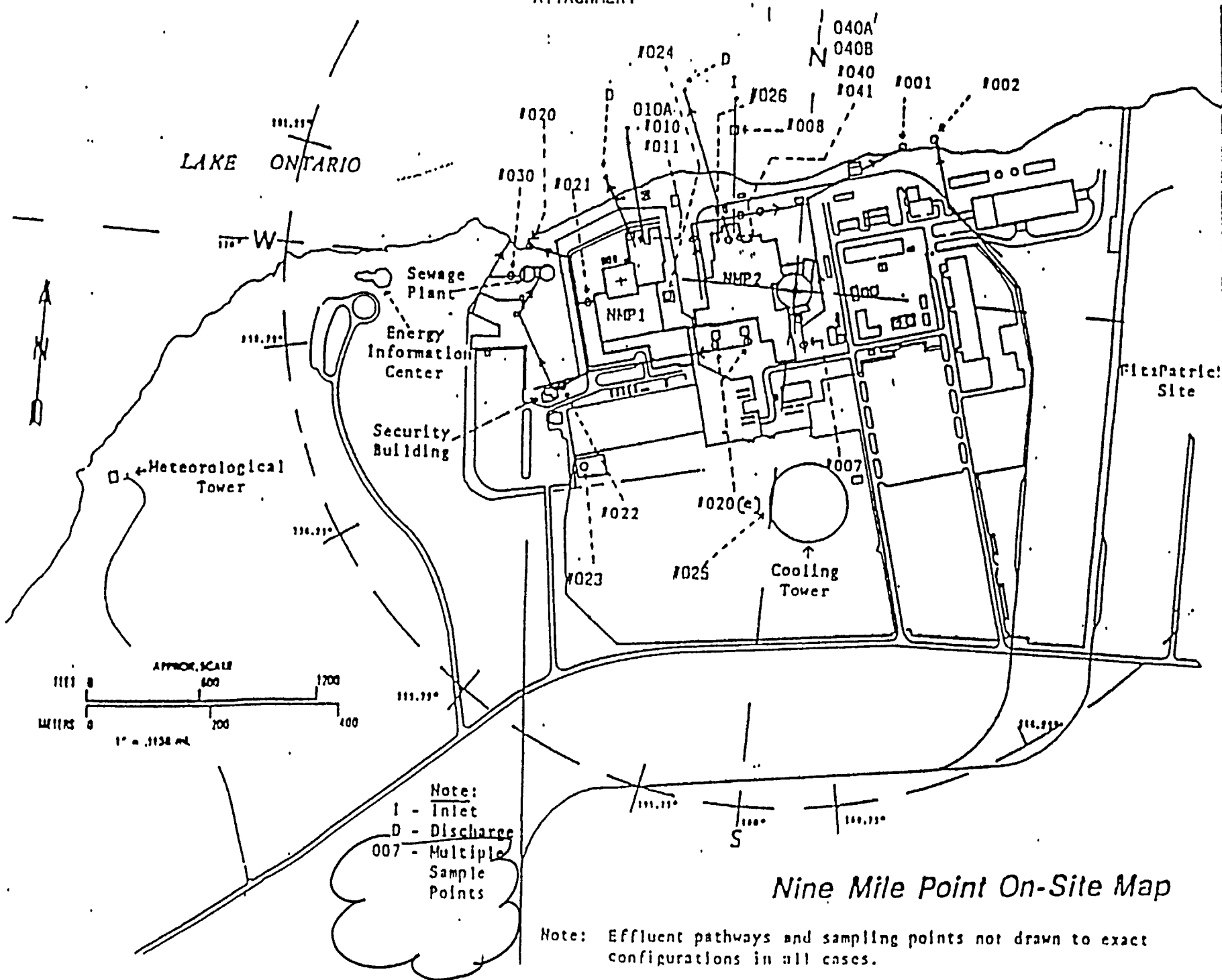
Revised Site Diagram (Attachment 1 to the current permit)



Nine Mile Point On-Site Map

Note: Effluent pathways and sampling points not drawn to exact configurations in all cases.

ATTACHMENT



Nine Mile Point On-Site Map

Note: Effluent pathways and sampling points not drawn to exact configurations in all cases.

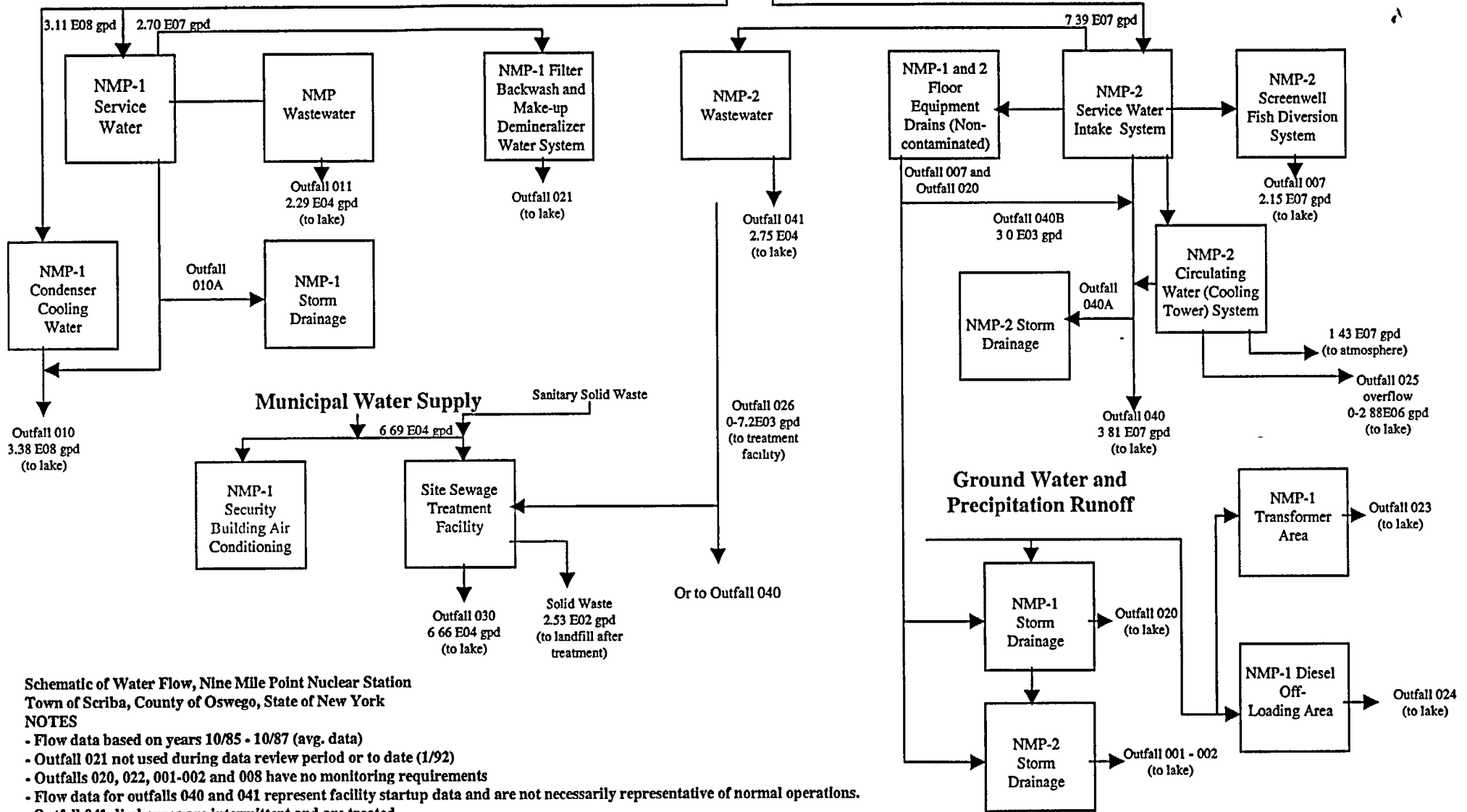
Modification Date: 11/24/98

Attachment 10

Revised Flow Chart (Attachment 2 to current permit)

ATTACHMENT 2
Nine Mile Point Nuclear Station
Permit #NY 000 1015

Lake Ontario

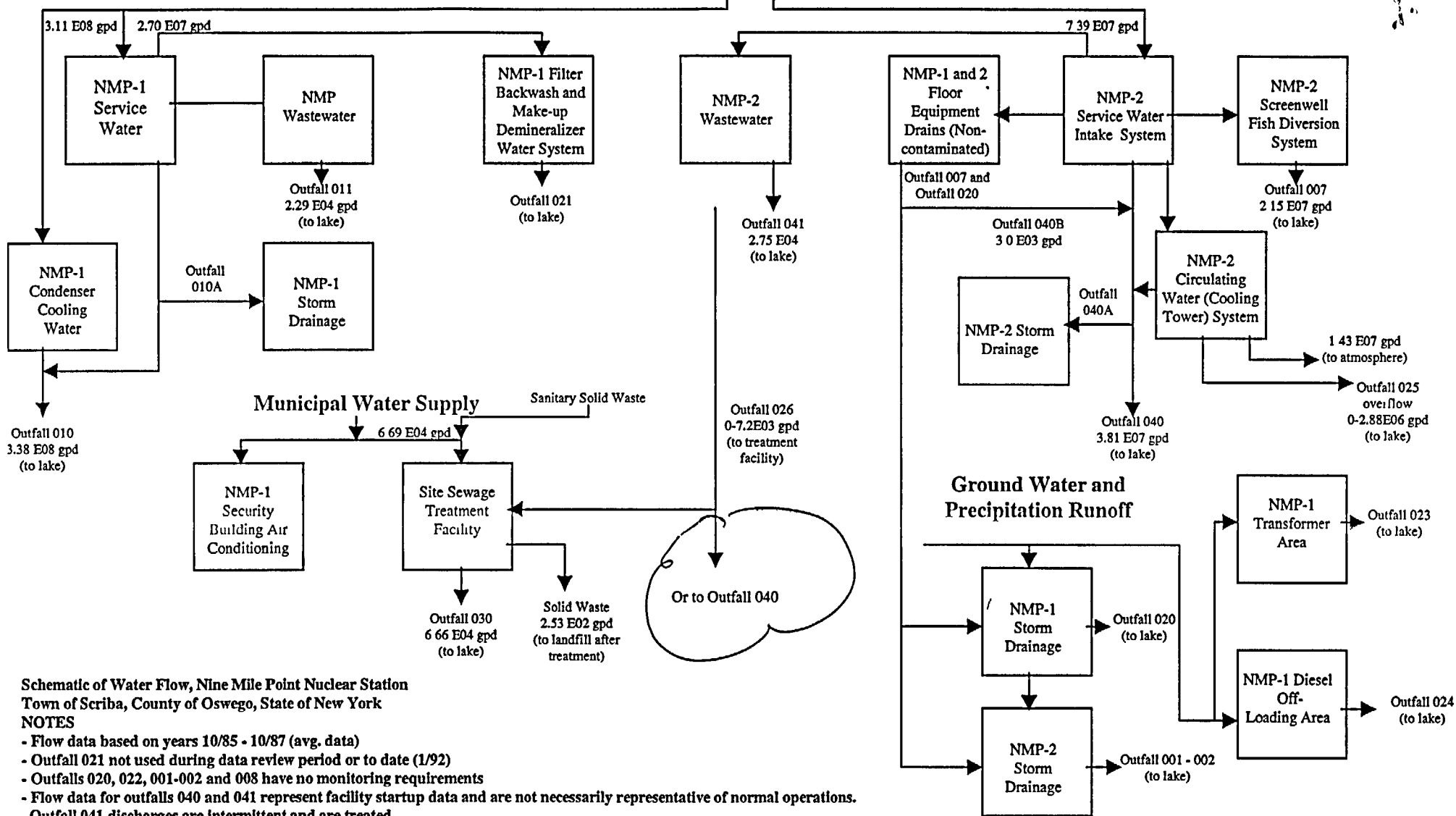


Schematic of Water Flow, Nine Mile Point Nuclear Station
Town of Scriba, County of Oswego, State of New York

NOTES

- Flow data based on years 10/85 - 10/87 (avg. data)
- Outfall 021 not used during data review period or to date (1/92)
- Outfalls 020, 022, 001-002 and 008 have no monitoring requirements
- Flow data for outfalls 040 and 041 represent facility startup data and are not necessarily representative of normal operations. Outfall 041 discharges are intermittent and are treated.
- Outfall 020 (NMP-2 switchyard drainage and Unit 1 administration drains) discharge to NMP-1 storm drainage only
- Outfall 030 solid waste data based on 10/86 - 10/87
- Outfall 011 discharges are intermittent and treated and very infrequent. Flow are minimal and infrequent. Flow shown is only when discharge is occurring. Flow during the review period is minimal.
- Outfalls 025 and 026 are infrequent discharges
- Outfall 007 includes specific drains:
 - 007A manhole #110, U2 Chiller Bldg.
 - 007B Admin sump 1
 - 007C U2 service water, 2DFM - sump 2B
 - 007D U2 service water, 2DFM - sump 2A
 - 007E U2 Control Bldg., 2DFM - sump 4
 - 007F manhole #103, U2 screenhouse west
 - 007G manhole #207, U2 screenhouse north

ATTACHMENT 2
Nine Mile Point Nuclear Station
Permit #NY 000 1015
Lake Ontario



Schematic of Water Flow, Nine Mile Point Nuclear Station
Town of Scriba, County of Oswego, State of New York
NOTES

- Flow data based on years 10/85 - 10/87 (avg. data)
- Outfall 021 not used during data review period or to date (1/92)
- Outfalls 020, 022, 001-002 and 008 have no monitoring requirements
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- Outfalls 025 and 026 are infrequent discharges
- Outfall 007 includes specific drains:

007A manhole #110, U2 Chiller Bldg..	007D U2 service water, 2DFM - sump 2A
007B Admin sump 1	007E U2 Control Bldg., 2DFM - sump 4
007C U2 service water, 2DFM - sump 2B	007F manhole #103, U2 screenhouse west
	007G manhole #207, U2 screenhouse north