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SUBJECT: NPDES/SPDES noncompliance notification:during period Jan-June 1993,station unable to meet requirements of SPDES Discharge Permit due to equipment calibr or equipment malfunction.

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NIAGARA MOHAWK

NINE MILE POINT NUCLEAR STATION / P.O. BOX 32 LYCOMING, NEW YORK 13093 / TELEPHONE (315) 343-2110

HJF93.032

August 13, 1993

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

RE: Nine Mile Point Unit 1
Docket No. 50-220
DPR-63

Nine Mile Point Unit 2
Docket No. 50-410
NPF-69

Subject: Report on Status of Nine Mile Point Nuclear Station SPDES Discharge Permit and Any Occurrences of Non-Compliance.

Gentlemen:

The following report has been issued so that the Commission's staff may be kept informed of any changes in the site's NPDES/SPDES Discharge Permit (No. NY-000-1015) and any permit occurrences of non-compliance. The site's permit is applicable to both Nine Mile Point Nuclear Station Unit 1 and Unit 2 (Docket Numbers 50-220/50-410).

During the period of January - June 1993, the station was unable to meet the requirements of the SPDES Discharge Permit on several occasions due to equipment calibration or equipment malfunction. The occasions of non-compliance were not related to permit effluent limitations. The occasions occurred when a non-safety related multi-parameter strip chart recorder failed to record continuous input from the plant process computer for Unit 2 discharge flow, discharge temperature, and intake-discharge temperature difference. During these instances, the process computer or the recorder had failed or was undergoing diagnostic/calibration work. On other occasions, a non-safety related strip chart recorder that records continuous input from station sensors at Unit 1 for discharge temperature difference recorded values that were too low. These periods of recorder inoperability were short and data was obtained from other station records. The New York State Department of Environmental Conservation considered these occasions minor as they had no impact on the environment. The impacts of these occasions were insignificant and were included in the comments section of the monthly summary reports.

Attached are copies of the monthly summary reports sent to the New York State Department of Environmental Conservation detailing the permit non-compliances.

A001 Add: NRR/DRSS/PRPB
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The existing SPDES Discharge Permit, which expired July 1, 1988, is expected to be renewed in the near future by the New York State Department of Environmental Conservation. Relative to this matter, Niagara Mohawk received a "Request for Extension of Uniform Procedure Act (UPA) Deadline" from the New York State Department of Environmental Conservation requesting more time to process the permit renewal. Subsequent to this request, Niagara Mohawk received from the State of New York a draft permit dated December 28, 1988, and a request for comments. Niagara Mohawk provided comments to the State of New York on March 10, 1989. Once the permit renewal is received, Niagara Mohawk will notify the Commission as part of the normal six-month update status report on the station's SPDES Permit and as part of any reporting requirements contained in Appendix B of the Unit 2 License (Environmental Protection Plan). In the meantime, the requirements of the expired permit will be followed.

Niagara Mohawk will fulfill the requirement to keep the NRC staff informed of any changes in the NPDES/SPDES Discharge Permit or of any permit non-compliances. Such information will be supplied on a semi-annual basis.

In the event there are any questions concerning permit non-compliances and revisions, or the reporting schedule, please contact Mr. Hugh Flanagan at (315) 349-2428.

Sincerely,

FOR K. A. DAHLBERG
PLANT MANAGER - NMP #1

Kim A. Dahlberg
Plant Manager - Unit 1

John H. Mueller
Plant Manager - Unit 2

KAD/JHM/HJF/psc
(HJF93.032)
Attachment

pc: Mr. Thomas T. Martin, Regional Administrator
Mr. W. L. Schmidt, Senior Resident Inspector
Mr. R. A. Capra, Director, NRR
Mr. D. S. Brinkman, Senior Project Manager, NRR
Mr. J. E. Menning, Project Manager, NRR

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
JANUARY 1993

COMMENTS

1. There was one discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during January 1993. The discharge was initiated on January 3, 1993, and continued at a rate of approximately 4.6 gpm into January 11, 1993. The discharge consisted of demineralized water. The volume discharged was approximately 60,000 gallons. Water from the Waste Neutralizing Tank originated from repetitive testing and flushing of demineralized water from the portable demineralized water unit in use at Unit 2.

2. The Unit 2 strip chart recorder used to measure outfall 040 (Cooling Tower Blowdown and Service Water) discharge flow, intake/discharge temperature difference and discharge temperature was inoperable for short periods in January 1993, due to instrument calibration/testing. Maximum water use and/or temperature data was used during these periods.

3. The Unit 1 strip chart recorder used to measure outfall 010 (Condenser Cooling Water) discharge temperature difference provided ΔT values that were too low for the month of January 1993. Therefore, Process Computer (P-log) records were used for this time period. Apparently, the calibration of the recorder may be out of specification. Investigation/repair has been initiated.

4. During the month of January 1993, the discharge of Unit 2 water continued under the terms and conditions of an amended Emergency Authorization dated December 22, 1989. The Amendment basically allows for the discharge of the Unit 2 Circulating Water System through the normal station discharge routes and/or through the Unit 1 facility Circulating Water System. The Amendment also limits the concentration of total copper in the mixing area in Lake Ontario to 17 ppb, and requires a monitoring frequency of twice per week.

   Copper discharged from the Circulating Water System during January 1993 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during January 1993 ranged from 64 ppb to 120 ppb (90 ppb average) total copper.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
JANUARY 1993

(continued)

Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on January 13, 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated September 11, 1989, and the Department's subsequent approval dated November 11, 1989. Results of online corrosion monitoring indicate that copper loss from the condenser tubes has decreased appreciably from system design specifications as a result of Copper-Trol use.

The total copper concentration in Lake Ontario during January 1993 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. Copper concentration in Lake Ontario ranged from 0.9 ppb to 2.5 ppb (1.7 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during January 1993.

5. Betz Slimcide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 service water system during January 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated July 10, 1991, and the Department's subsequent approval dated March 16, 1992. The concentrations of total residual chlorine (TRC) did not exceed the discharge limitation of 0.2 mg/l as determined from analysis of grab samples collected from the service water system during discharge.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
FEBRUARY 1993

COMMENTS

1. There was no discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during February 1993.

2. The Unit 2 strip chart recorder used to measure outfall 040 (Cooling Tower Blowdown and Service Water) discharge flow, intake/discharge temperature difference and discharge temperature was inoperable for a short period on February 1, 1993, due to instrument calibration/testing. Maximum water use and/or temperature data was used during these periods.

3. The Unit 1 strip chart recorder used to measure outfall 010 (Condenser Cooling Water) discharge temperature difference, which was providing ΔT values that were too low, was repaired on February 12, 1993. Prior to the repair, Process Computer (P-log) records were used to obtain ΔT values. The repair of this recorder took approximately two months due to the time necessary to obtain spare parts, which are not readily available.

4. No preprinted DMR form was received for outfall 022 (Security Building Air Conditioning). There were no discharges from this outfall directly to Lake Ontario (receiving water body) during February 1993. Any discharge during February 1993 was directed to the site sewage treatment facility.

5. During the month of February 1993, the discharge of Unit 2 circulating water continued under the terms and conditions of an amended Emergency Authorization dated December 22, 1989. The Amendment basically allows for the discharge of the Unit 2 Circulating Water System through the normal station discharge routes and/or through the Unit 1 facility Circulating Water System. The Amendment also limits the concentration of total copper in the mixing area in Lake Ontario to 17 ppb, and requires a monitoring frequency of twice per week.

   Copper discharged from the Circulating Water System during February 1993 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during February 1993 ranged from 73 ppb to 116 ppb (93 ppb average) total copper.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
FEBRUARY 1993

(continued)

The total copper concentration in Lake Ontario during February 1993 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. Copper concentration in Lake Ontario ranged from 1.2 ppb to 2.6 ppb (1.9 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during February 1993.

6. Betz Slimcide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 service water system during February 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated July 10, 1991, and the Department's subsequent approval dated March 16, 1992. The concentrations of total residual halogen (TRH) did not exceed the discharge limitation of 0.2 mg/l as determined from analysis of grab samples collected from the service water system during discharge.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MARCH 1993

COMMENTS

1. There was one discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during March 1993. The discharge was initiated on March 22, 1993, and continued at a rate of approximately 5 gpm into March 23, 1993. The discharge consisted of demineralized water. The volume discharged was approximately 9,000 gallons. Water from the Waste Neutralizing Tank originated from repetitive testing and flushing of demineralized water from the portable demineralized water unit in use at Unit 2.

2. The Unit 2 strip chart recorder used to measure outfall 040 (Cooling Tower Blowdown and Service Water) discharge flow, intake/discharge temperature difference and discharge temperature was inoperable for short periods on March 5, 16, and 26, 1993, due to instrument calibration/testing and /or computer preventive maintenance. Maximum water use and/or temperature data was used during these periods.

3. Betz Clam-Trol (CT-1), a molluscicide used for zebra mussel control, was added to the Unit 1 service water system from March 10, 1993 to March 11, 1993. The addition followed the requirements of the NYSDEC as contained in the site's NPDES/SPDES Permit modification dated September 28, 1990. All detoxified effluent sample results were less than the 0.2 mg/l permit limitation.

4. No preprinted DMR form was received for outfall 022 (Security Building Air Conditioning). There were no discharges from this outfall directly to Lake Ontario (receiving water body) during March 1993. Any discharge during March 1993 was directed to the site sewage treatment facility.

5. During the month of March 1993, the discharge of Unit 2 circulating water continued under the terms and conditions of an amended Emergency Authorization dated December 22, 1989. The Amendment basically allows for the discharge of the Unit 2 Circulating Water System through the normal station discharge routes and/or through the Unit 1 facility Circulating Water System. The Amendment also limits the concentration of total copper in the mixing area in Lake Ontario to 17 ppb, and requires a monitoring frequency of twice per week.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MARCH 1993

(continued)

Copper discharged from the Circulating Water System during March 1993 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during March 1993 ranged from 73 ppb to 347 ppb (125 ppb average) total copper.

Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on March 3, 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated September 11, 1989, and the Department's subsequent approval dated November 11, 1989. Results of online corrosion monitoring indicate that copper loss from the condenser tubes has decreased appreciably from system design specifications as a result of Copper-Trol use.

The total copper concentration in Lake Ontario during March 1993 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. Copper concentration in Lake Ontario ranged from 0.1 ppb to 5.3 ppb (2.1 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during March 1993.

6. Betz Slimcide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 service water system during March 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated July 10, 1991, and the Department's subsequent approval dated March 16, 1992. The concentrations of total residual halogen (TRH) did not exceed the discharge limitation of 0.2 mg/l as determined from analysis of grab samples collected from the service water system during discharge.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
APRIL 1993

COMMENTS

1. There were two discharges from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during April 1993. The first discharge was initiated on April 12, 1993, and continued at a rate of approximately 17 gpm into April 15, 1993. The second discharge was initiated on April 19, 1993 and continued at a rate of approximately 15 gpm into April 21, 1993. Both discharges consisted of demineralized water. The volumes discharged were approximately 60,000 gallons and 15,000 gallons. Water from the Waste Neutralizing Tank originated from repetitive testing and flushing of demineralized water from the portable demineralized water unit in use at Unit 2.

2. The Unit 2 strip chart recorder used to measure outfall 040 (Cooling Tower Blowdown and Service Water) discharge flow, intake/discharge temperature difference and discharge temperature was inoperable for short periods in April 1993, due to instrument calibration/testing and /or computer preventive maintenance. Maximum water use and/or temperature data was used during these periods.

3. The Unit 1 strip chart recorder used to measure outfall 010 (Condenser Cooling Water) discharge temperature difference, was down for repairs from April 13, 1993 to April 23, 1993. During this repair, Process Computer (P-log) records were used to obtain ΔT values.

4. On April 1, 1993, the Unit 1 oil spill catchment basin was discharged because the basin was near its maximum design level (due to precipitation) which required it to be discharged. In the event the basin was allowed to exceed this level, then there would not be complete assurance that the maximum credible oil spill would be contained. This outfall is presently being added to the SPDES Discharge Permit. Prior to the discharge, an oil and grease sample was obtained and was found to contain less than 0.1 mg/liter oil and grease. Samples for total suspended solids and pH were also obtained and shown results of 2.5 mg/liter and 7.10 respectively. The volume discharged was approximately 140,700 gallons of water.

5. During the month of April 1993, the discharge of Unit 2 circulating water continued under the terms and conditions of an amended Emergency Authorization dated December 22, 1989. The Amendment basically allows for the discharge of the Unit 2 Circulating Water System through the normal station discharge routes and/or through the Unit 1 facility Circulating Water System. The Amendment also limits the concentration of total copper in the mixing area in Lake Ontario to 17 ppb, and requires a monitoring frequency of twice per week.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
APRIL 1993

(continued)

Copper discharged from the Circulating Water System during April 1993 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during April 1993 ranged from 73 ppb to 135 ppb (94 ppb average) total copper.

Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on April 14, 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated September 11, 1989, and the Department's subsequent approval dated November 11, 1989. Results of online corrosion monitoring indicate that copper loss from the condenser tubes has decreased appreciably from system design specifications as a result of Copper-Trol use.

The total copper concentration in Lake Ontario during April 1993 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. Copper concentration in Lake Ontario ranged from 0.6 ppb to 3.3 ppb (1.8 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during April 1993.

6. Betz Slimcide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 service water system during April 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated July 10, 1991, and the Department's subsequent approval dated March 16, 1992. The concentrations of total residual halogen (TRH) did not exceed the discharge limitation of 0.2 mg/l as determined from analysis of grab samples collected from the service water system during discharge.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MAY 1993

COMMENTS

1. There were two discharges from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during May 1993. The first discharge was initiated on May 18, 1993, and continued at a rate of approximately 6.2 gpm into May 19, 1993. The second discharge was initiated on May 20, 1993, and continued at a rate of approximately 6.8 gpm into May 25, 1993. Both discharges consisted of demineralized water. The volumes discharged were approximately 10,900 gallons and 49,100 gallons. Water from the Waste Neutralizing Tank originated from repetitive testing and flushing of demineralized water from the portable demineralized water unit in use at Unit 2.

2. The Unit 2 strip chart recorder used to measure outfall 040 (Cooling Tower Blowdown and Service Water) discharge flow, intake/discharge temperature difference and discharge temperature was inoperable for short periods in May 1993, due to instrument calibration/testing and /or computer preventive maintenance. Maximum water use and/or temperature data was used during these periods.

3. No preprinted DMR form was received for outfall 022 (Security Building Air Conditioning). There were no discharges from this outfall directly to Lake Ontario (receiving water body) during May 1993. Any discharge during May 1993 was directed to the site sewage treatment facility.

4. During the month of May 1993, the discharge of Unit 2 circulating water continued under the terms and conditions of an amended Emergency Authorization dated December 22, 1989. The Amendment basically allows for the discharge of the Unit 2 Circulating Water System through the normal station discharge routes and/or through the Unit 1 facility Circulating Water System. The Amendment also limits the concentration of total copper in the mixing area in Lake Ontario to 17 ppb, and requires a monitoring frequency of twice per week.

   Copper discharged from the Circulating Water System during May 1993 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during May 1993 ranged from 74 ppb to 159 ppb (112 ppb average) total copper.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MAY 1993

(continued)

The total copper concentration in Lake Ontario during May 1993 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. Copper concentration in Lake Ontario ranged from 2.0 ppb to 4.8 ppb (3.5 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during May 1993.

5. Betz Slimcide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 service water system during May 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated July 10, 1991, and the Department's subsequent approval dated March 16, 1992. The concentrations of total residual halogen (TRH) did not exceed the discharge limitation of 0.2 mg/l as determined from analysis of grab samples collected from the service water system during discharge.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
JUNE 1993

COMMENTS

1. There was one discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during June 1993. The discharge was initiated on June 15, 1993, and continued at a rate of approximately 8.9 gpm into June 19, 1993. The discharge consisted of demineralized water. The volume discharged was approximately 60,000 gallons. Water from the Waste Neutralizing Tank originated from repetitive testing and flushing of demineralized water from the portable demineralized water unit in use at Unit 2.

2. The Unit 2 strip chart recorder used to measure outfall 040 (Cooling Tower Blowdown and Service Water) discharge flow, intake/discharge temperature difference and discharge temperature was inoperable for short periods in June 1993, due to instrument calibration/testing and /or computer preventive maintenance. Maximum water use and/or temperature data was used during these periods.

3. No preprinted DMR form was received for outfall 022 (Security Building Air Conditioning). There were no discharges from this outfall directly to Lake Ontario (receiving water body) during June 1993. Any discharge during June 1993 was directed to the site sewage treatment facility.

4. On June 7, 1993, the Unit 1 oil spill catchment basin was discharged because the basin was near its maximum design level (due to precipitation) which required it to be discharged. In the event the basin was allowed to exceed this level, then there would not be complete assurance that the maximum credible oil spill would be contained. This outfall is presently being added to the SPDES Discharge Permit. Prior to the discharge, an oil and grease sample was obtained and was found to contain 0.6 mg/liter oil and grease. Samples for total suspended solids and pH were also obtained and provided results of 2.4 mg/liter and 7.3 respectively. The volume discharged was approximately 140,700 gallons of water.

5. During the month of June 1993, the discharge of Unit 2 circulating water continued under the terms and conditions of an amended Emergency Authorization dated December 22, 1989. The Amendment basically allows for the discharge of the Unit 2 Circulating Water System through the normal station discharge routes and/or through the Unit 1 facility Circulating Water System. The Amendment also limits the concentration of total copper in the mixing area in Lake Ontario to 17 ppb, and requires a monitoring frequency of twice per week.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
June 1993

(continued)

Copper discharged from the Circulating Water System during June 1993 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during June 1993 ranged from 64 ppb to 170 ppb (108 ppb average) total copper.

Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on June 9, 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated September 11, 1989, and the Department's subsequent approval dated November 11, 1989. Results of online corrosion monitoring indicate that copper loss from the condenser tubes has decreased appreciably from system design specifications as a result of Copper-Trol use.

The total copper concentration in Lake Ontario during June 1993 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. Copper concentration in Lake Ontario ranged from 2.2 ppb to 4.3 ppb (3.2 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during June 1993.

6. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 service water system during June 1993. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated July 10, 1991, and the Department's subsequent approval dated March 16, 1992. The concentrations of total residual halogen (TRH) did not exceed the discharge limitation of 0.2 mg/l as determined from analysis of grab samples collected from the service water system during discharge.