

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9409070167 DOC.DATE: 94/08/25 NOTARIZED: NO DOCKET #
FACIL:50-220 Nine Mile Point Nuclear Station, Unit 1, Niagara Powe 05000220
50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
AUTH.NAME AUTHOR AFFILIATION
MCCORMICK,M.J. Niagara Mohawk Power Corp.
RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Forwards comments on rept of status of Nine Mile Point
Nuclear Station SPDES permit & occurrences of noncompliance
for Jan-June 1994.

DISTRIBUTION CODE: A001D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 18
TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME		LTTR	ENCL
	PD1-1 LA		1	1		PD1-1 PD		1	1
	BRINKMAN,D.		2	2		BRINKMAN,D		2	2
INTERNAL:	ACRS		6	6		NRR/DE/EELB		1	1
	NRR/DRCH/HICB		1	1		NRR/DRPW		1	1
	NRR/DSSA/SPLB		1	1		NRR/DSSA/SRXB		1	1
	NUDOCS-ABSTRACT		1	1		OC/LFDCB		1	0
	OGC/HDS3		1	0		<u>REG FILE</u>	01	1	1
EXTERNAL:	NOAC		1	1		NRC PDR		1	1

NRR/PRESS/PRPB

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL
DESK, ROOM P1-37 (EXT. 504-2083) TO ELIMINATE YOUR NAME FROM
DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR ~~28~~ ENCL ~~21~~
24 *22*

Er-1

P
R
I
O
R
I
T
Y
1
D
O
C
U
M
E
N
T



August 25, 1994
(HJF94.065)

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 the Status of the Nine Mile Point Nuclear Station SPDES Discharge Permit and Any Occurrences of Non-Compliance.

Gentlemen:

The following report is being issued so that the Commission's staff may be kept informed of any changes in the Nine Mile Point Nuclear Station's NPDES/SPDES Discharge Permit (No. NY-000-1015) and any permit occurrences of non-compliance.

During the period of January - June 1994, 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 from January 8, 1994, through February 12, 1994. With the exception of the Unit 1 strip chart recorder, these periods of recorder inoperability were short. However, on all occasions data was obtained from other station records. Niagara Mohawk considers these occasions to have had a negligible impact on the environment. The New York State Department of Environmental Conservation (NYSDEC) considered these occasions to be minor as they had no significant impact on the environment. A description and impact of these occurrences were included in the comments section of the monthly summary reports sent to the NYSDEC.

9409070167 940825
PDR ADCK 05000220
R PDR

Acc'l
Add: NRR/DESS/PRPB

See Encl
1 1



11

[The body of the document contains extremely faint and illegible text, likely bleed-through from the reverse side of the page. The text is scattered across the page and cannot be transcribed accurately.]

In addition, on three separate occasions, Unit 1 experienced occurrences of non-compliance relative to condenser intake/station discharge delta temperature limitations. Reverse flow was initiated several times during the months of January, February, and March when ice was brought in from Lake Ontario. All three non-compliances occurred while in the process of returning to normal flow configuration (also due to severe icing conditions) and the condenser intake/station discharge delta temperature limitation of 35°F was exceeded.

Niagara Mohawk would like to clarify that the occurrences of temperature exceedence, as indicated on the attached Discharge Monitoring Report (DMR) comments sheet, were reported as: 39.5°F for 95 seconds on January 9, 1994, 36.5°F for 95 seconds on February 7, 1994, and 40°F for 162 seconds on March 19, 1994. However, as also reported on the DMR comments sheets for January 1994 and February 1994, the Unit 1 strip chart recorder used to measure Outfall 010 (condenser cooling water) discharge temperature difference (ΔT) provided values that were too low from January 8, 1994, through February 12, 1994. A calibration value was determined (based on actual inlet and outlet canal temperature measurements) and then applied to recorder ΔT values to determine correct ΔT values for these dates. The values reported for both the January 9 and February 7 exceedence were based on the actual strip chart recordings and not on the corrected values. Therefore, the corrected ΔT values for January 9, 1994, and February 7, 1994, should be 43.05°F and 42.40°F respectively. The ΔT value reported for March 19, 1994, is correct as the strip chart recorder was repaired and returned to service on February 13, 1994. In addition, on January 22, 1994, while again returning from reverse flow (also for deicing) a maximum ΔT value of 33.5°F was recorded on the strip chart recorder. As in the above instances, the calibration value was not applied to this ΔT value. After applying (adding) the determined calibration value, the corrected ΔT should be 37.15°F which is an exceedence of the ΔT limit of 35°F. Though not reported to the NYSDEC in January, this occurrence has since been reported, and per DEC direction, a Report of Non-Compliance Event documenting the January 22, 1994, occurrence as well as corrected DMR data sheets for January and February will be submitted to the NYSDEC under separate cover. The occurrences of ΔT non-compliances were caused by the inability to fully close required gates. While care was taken to ensure proper gate operation, these occurrences were not avoidable due to the extent of the icing condition. Considering the short duration, the environmental impacts from these events were also negligible.

Niagara Mohawk is in the process of obtaining regulatory relief that will allow for minor events where the Unit 1 condenser intake/station discharge delta temperature limitations may be exceeded for short periods of time during tunnel reverse flow or return to normal flow operations.

Attached are copies of the comment pages and Report of Non-Compliance Event forms sent monthly to the New York State Department of Environmental Conservation detailing the permit non-compliances.

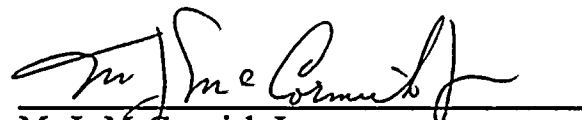


The existing SPDES Discharge Permit, which expired July 1, 1988, is expected to be renewed in the near future by the New York State Department of Environmental Conservation. Subsequent to this request, Niagara Mohawk received from the State of New York a new draft permit dated February 15, 1994, and a request for comments. Niagara Mohawk provided comments to the State of New York on May 23, 1994. The status of the draft permit is checked on a periodic basis. 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,



M. J. McCormick Jr.
VP-Nuclear Safety Assessment & Support

HJF/psc
(HJF94.065)
Attachments

pc: Mr. Thomas T. Martin, Regional Administrator, Region 1
Mr. B. S. Norris, Senior Resident Inspector
Mr. M. L. Boyle, Acting Director, Project Directorate I-1, NRR
Mr. D. S. Brinkman, Senior Project Manager, NRR
Records Management

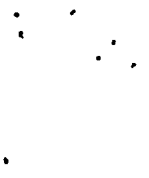


DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
JANUARY 1994

COMMENTS

1. Discharge temperatures were higher during short periods on occasions when the Unit 1 facility reversed flow in the intake and discharge tunnels. Reverse flow was initiated several times during January when ice was brought in from Lake Ontario. On one occasion, on January 9, 1994, while in the process of returning to normal flow, the condenser intake/station discharge delta temperature exceeded the permit limitation of 35°F. A maximum delta T of 39.5°F was reached and the duration of the non-compliance was no more than 95 seconds. This occurrence was caused by the inability to fully close required gates. The gates remained open approximately 6 feet for a period of time until they could be fully closed. Considering the short duration, there is no environmental impact from this event.
2. 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 January 8 - 31, 1994. A calibration value was determined based on actual inlet and outlet canal temperature measurements that were obtained during routine fish impingement sampling. This calibration factor was then applied to recorder ΔT values to determine correct ΔT values for January 8 - 31, 1994. Investigation and work order for repair have been completed and the recorder was returned to service in February 1994.
3. 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 1994, due to testing/calibration and a problem with the recorder pen. The problem was corrected immediately upon discovery and maximum water use and/or temperature data were used during these periods.
4. Copper discharged from the Unit 2 Circulating Water System during January 1994 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during January 1994 ranged from 74 ppb to 216 ppb (129 ppb average) total copper.

The total copper concentration in Lake Ontario during January 1994 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. The copper concentration in Lake Ontario ranged from 0.8 ppb to 3.8 ppb (2.1 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during January 1994.



**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
JANUARY 1994**

(continued)

5. Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on January 18, 1994. 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.
6. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 Service Water System during January 1994. 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.
7. On the attached SPDES/DMR forms "NODI C" was noted for Unit 1 Outfall 010 and Unit 2 Outfall 040 as there were no Clamtrol additions during January 1994. Also, for Unit 2 Outfall 041, since all pH analyses fell within the 6.0 to 9.0 range, "NODI C" was noted for the pH range of 4.0 to 9.0.



SECTION 1

New York State Department of Environmental Conservation
Division of Water



Report of Noncompliance Event

To: DEC Water Contact William McCarthy DEC Region: 7

Report Type: 5 Day Permit Violation Order Violation Anticipated Noncompliance Bypass/Overflow

SECTION 2

SPDES #: NY- 000-1015 Facility: Nine Mile Point Nuclear Station

Date of noncompliance: 01 / 09 / 94 Location (Outfall) Treatment Unit, or Pump Station): 010

Description of noncompliance(s) and cause(s): At approximately 1810 hrs. on 01/09/94, Unit 1 entered a reverse flow configuration (for the purpose of de-icing). At approximately 2050 hrs. while returning to normal flow configuration (again for de-icing), the Control Room recorder indicated a ΔT of 39.5°F, which exceeds the SPDES Permit limit of 35°F. This condition lasted for no more than 95 seconds. This was caused by a situation where required Gates could not be fully closed in

(See attachment)

Has event ceased? (Yes) (No) If so, when? 1/9/94 Was event due to plant upset? (Yes) (No) SPDES limits violated? (Yes) (No)

Start date, time of event: 01 / 09 / 94, 20 :50 (AM) (PM) End date, time of event: 01 / 09 / 94, 20 :51 (AM) (PM)

Date, time oral notification made to DEC? 01/11/94, 11 :00 (AM) (PM) DEC Official contacted: William McCarthy

Immediate corrective actions: The required gates were able to be fully closed after a period of time.

Preventive (long term) corrective actions: The procedure for reverse flow operation and controlling gate operation, was reviewed and revised in order to facilitate the opening and closing of canal gates in a more timely manner.

SECTION 3

Complete this section if event was a bypass:

Bypass amount: _____ Was prior DEC authorization received for this event? (Yes) (No)

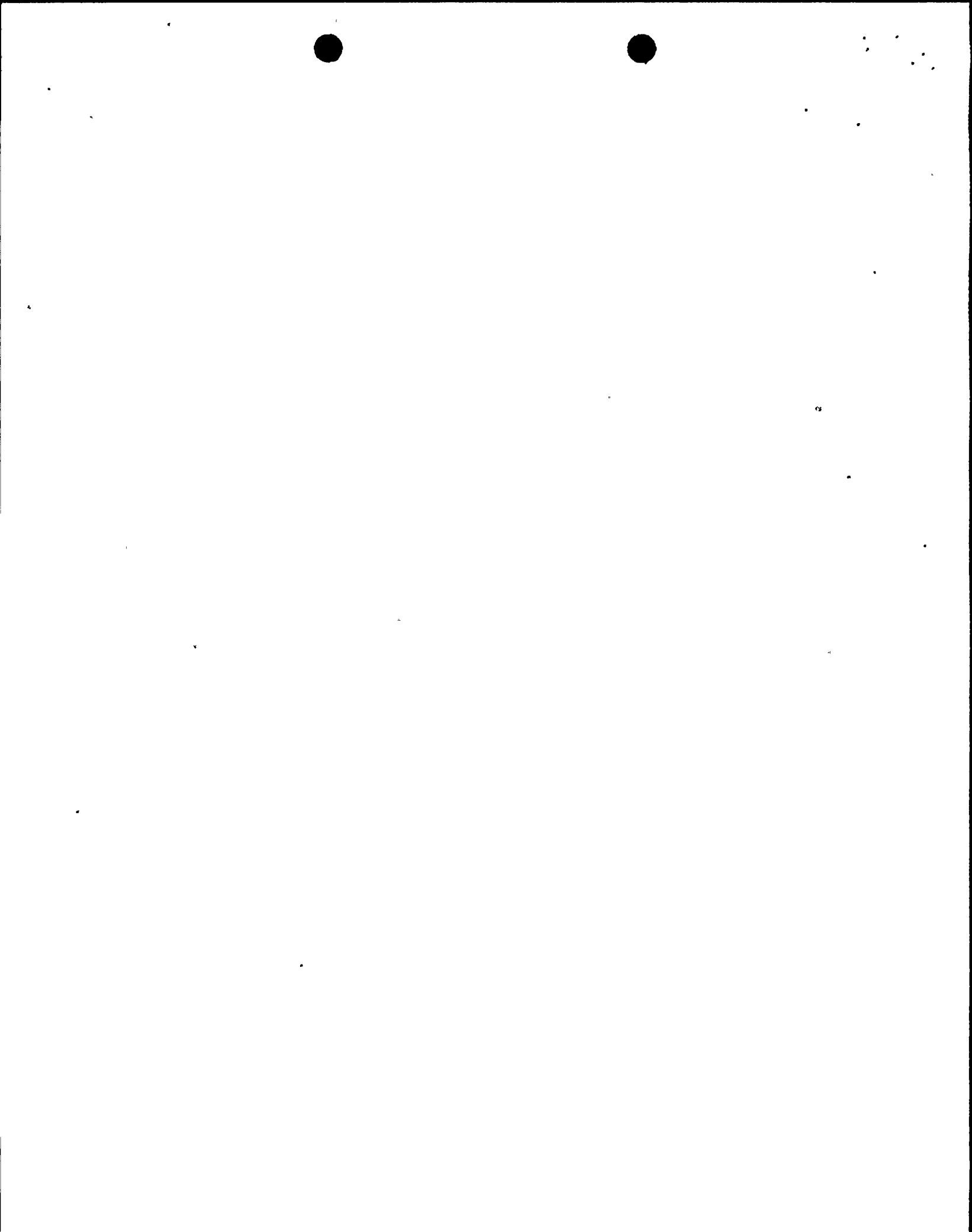
DEC Official contacted: _____ Date of DEC approval: ____ / ____ / ____

Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.

SECTION 4

Facility Representative: Hugh J. Alavagan Title: Supervisor Env. Prot. Date: 02 / 24 / 94

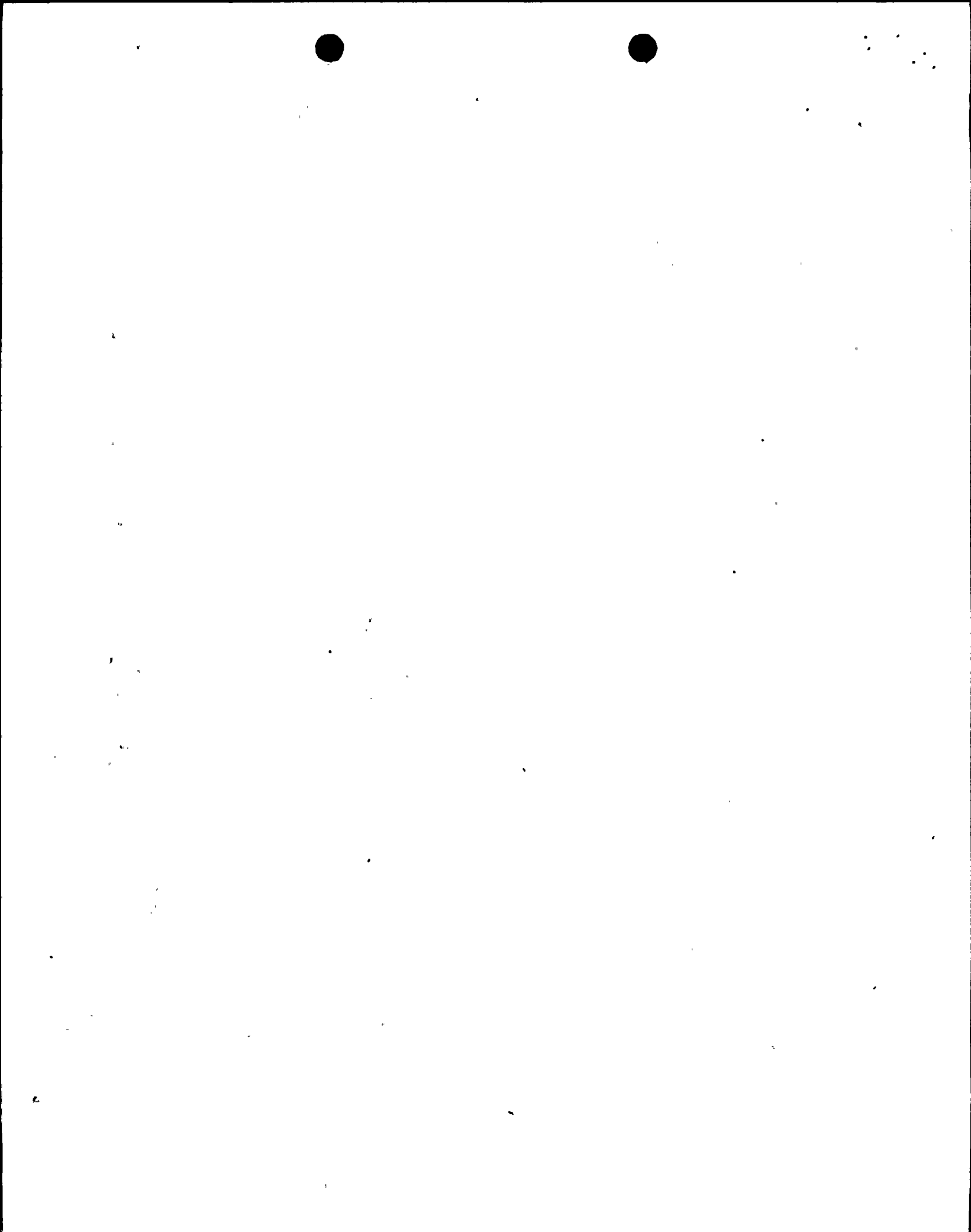
Phone #: (315) 349 . 2428 Fax #: (315) 349 . 2371



REPORT OF NONCOMPLIANCE EVENT

SECTION 2: (Cont)

a timely manner. The failure of the gates to fully close in a timely manner is not fully understood but was not due to personnel error.

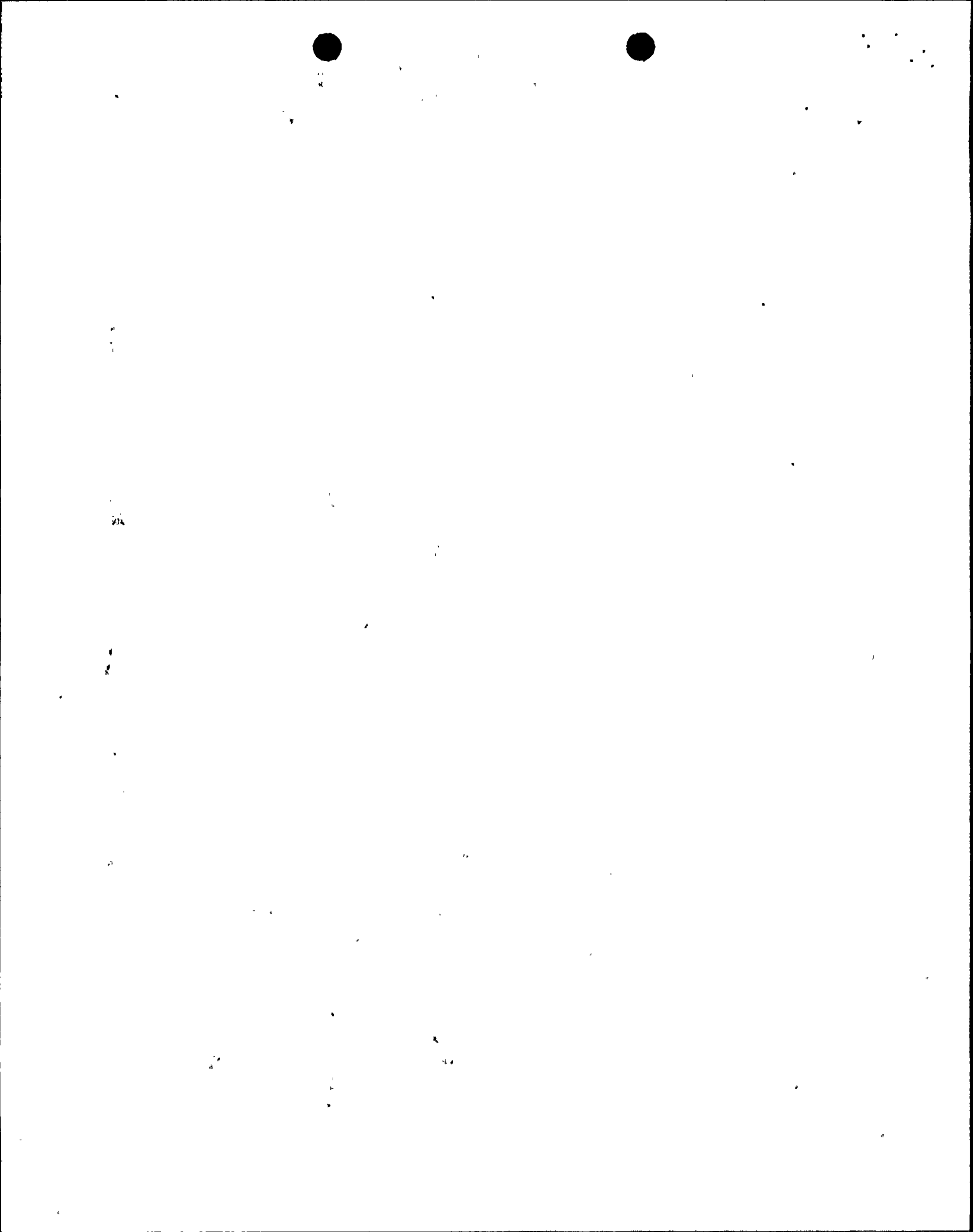


**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
FEBRUARY 1994**

COMMENTS

1. There was one discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during February 1994. The discharge was initiated on February 14, 1994, and continued at a rate of approximately 11.2 gpm into February 18, 1994. 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. 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 1994. Any discharge during February 1994 was directed to the site sewage treatment facility.
3. The discharge temperatures were higher than normal (but within permit limits) for short periods for February 1994, on occasions when the Unit 1 facility reversed flow in the intake and discharge tunnels. Reverse flow was initiated several times during February when ice was brought in from Lake Ontario. On one occasion, on February 7, 1994, while in the process of returning to normal flow (also due to severe icing conditions), the condenser intake/station discharge delta temperature exceeded the permit limitation of 35°F. A maximum delta T of 36.5°F was reached and the duration of the non-compliance was no more than 95 seconds. This occurrence was caused by the inability to fully close required gates. While care was taken to ensure proper gate operation, this occurrence was not avoidable due to the extent of the icing conditions. Considering the short duration, there is no environmental impact from this event.

The Permittee is currently in the process of reviewing the draft SPDES Permit. A footnote will be drafted and included with the Permittee's comments that will allow for minor events where the limitation is exceeded for short periods of time during canal reverse flow or return to normal flow operations.



**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
FEBRUARY 1994**

(continued)

4. 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 February 1-12, 1994. A calibration value was determined based on actual inlet and outlet canal temperature measurements that were obtained during routine fish impingement sampling. This calibration factor was then applied to recorder ΔT values to determine correct ΔT values for February 1-12, 1994. Investigation and work order for repair have been completed and the recorder was returned to service on February 13, 1994.
5. 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 February 1994, due to testing/calibration. Maximum water use and/or temperature data were used during these periods.
6. Copper discharged from the Unit 2 Circulating Water System during February 1994 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during February 1994 ranged from 69 ppb to 119 ppb (87 ppb average) total copper.

The total copper concentration in Lake Ontario during February 1994 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. The copper concentration in Lake Ontario ranged from 0.8 ppb to 2.6 ppb (1.5 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during February 1994.

7. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 Service Water System during February 1994. 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.
8. On the attached SPDES/DMR forms "NODI C" was noted for Unit 1 Outfall 010 and Unit 2 Outfall 040 as there were no Clam-Trol additions during February 1994. Also, for Unit 2 Outfall 041, since all pH analyses fell within the 4.0 to 9.0 range, "NODI C" was noted for the pH range of 6.0 to 9.0.



SECTION 1

New York State Department of Environmental Conservation
Division of Water



Report of Noncompliance Event

To: DEC Water Contact William McCarthy DEC Region: 7

Report Type: 5 Day Permit Violation Order Violation Anticipated Noncompliance Bypass/Overflow

SECTION 2

SPDES #: NY- 000-1015 Facility: Nine Mile Point Nuclear Station

Date of noncompliance: 02 / 07 / 94 Location (Outfall, Treatment Unit, or Pump Station): 010

Description of noncompliance(s) and cause(s): At approximately 0700 hrs. on 02/07/94, Unit 1 entered a reverse flow configuration (for the purpose of de-icing). At approximately 2345 hrs. while returning to normal flow configuration (again for de-icing), the Control Room recorder indicated a ΔT of 36.5°F, which exceeds the SPDES Permit limit of 35°F. This condition lasted for no more than 95 seconds. This was caused by a situation where required gates could not be fully closed in

(Continued on reverse side) 02/07/94 Has event ceased? (Yes) (No) 02/07/94 If so, when? 02/07/94 Was event due to plant upset? (Yes) (No) 02/07/94 SPDES limits violated? (Yes) (No) 02/07/94

Start date, time of event: 02 / 07 / 94, 23:45 (AM) (PM) End date, time of event: 02 / 07 / 94, 23:46 (AM) (PM)

Date, time oral notification made to DEC? 02/10 / 94, 16:25 (AM) (PM) DEC Official contacted: William McCarthy

Immediate corrective actions: The required gates were able to be fully closed after a period of time.

Preventive (long term) corrective actions: Due to the difficult environmental conditions (during severe icing) this situation was unavoidable. Therefore, NMPC will request a change to our SPDES Permit to allow a higher ΔT for short periods of time during flow mode changes.

SECTION 3

Complete this section if event was a bypass:

Bypass amount: _____ Was prior DEC authorization received for this event? (Yes) (No) _____

DEC Official contacted: _____ Date of DEC approval: 1 / 1

Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.

SECTION 4

Facility Representative: Kugh J. Alvarado Title: Supv. Env. Protection Date: 03, 24, 94

Phone #: (315) 349-2428 Fax #: (315) 349-9371

SECTION 2: (Continued)

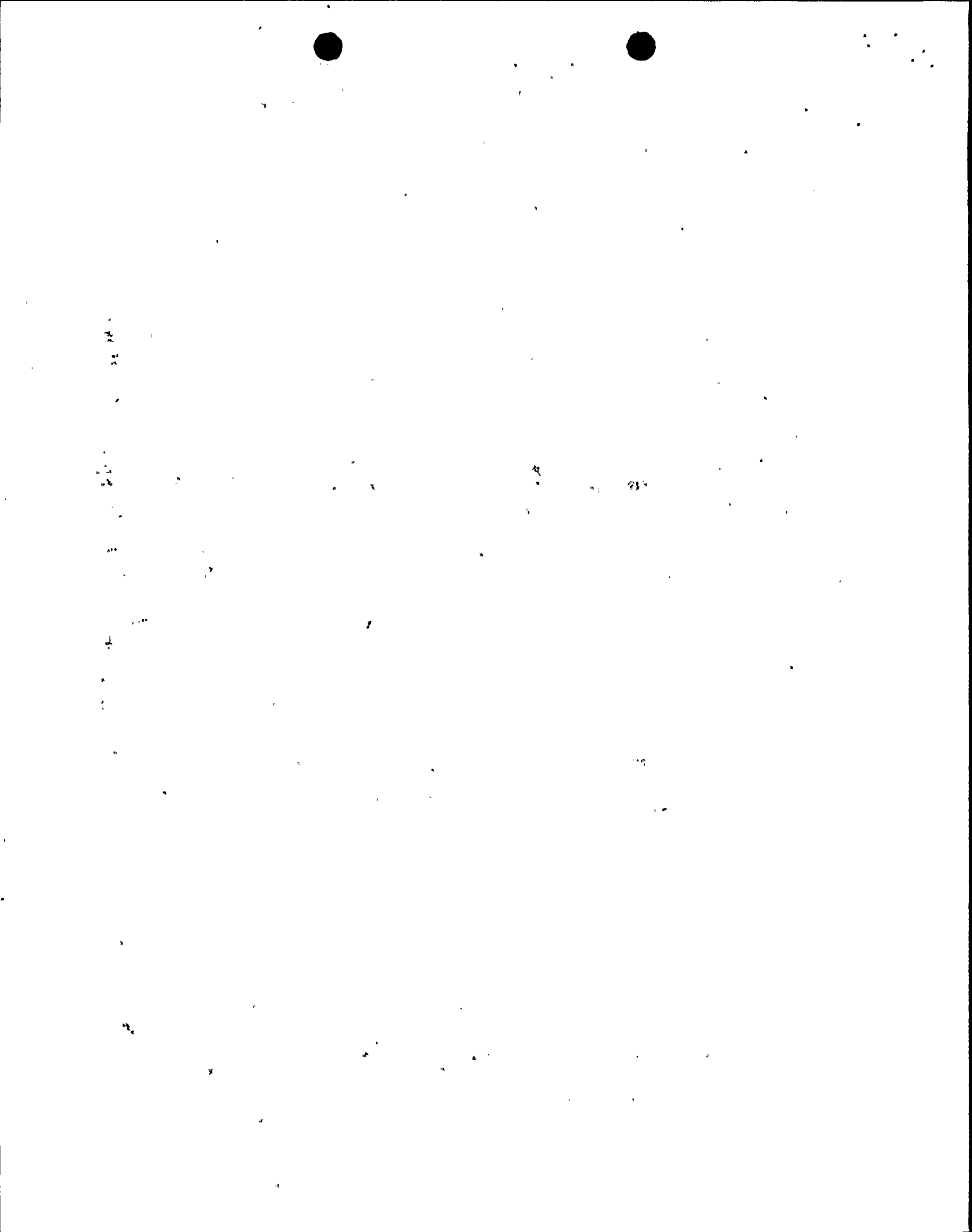
a timely manner. The failure of the gates to fully close in a timely manner is not fully understood but was not due to personnel error.

**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MARCH 1994**

COMMENTS

1. On March 22, 1994, 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 <5 mg/liter oil and grease. Samples for total suspended solids and pH were also obtained and provided results of 5.7 mg/liter and 6.1 respectively. The volume discharged was approximately 160,850 gallons of water.
2. 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 1994. Any discharge during March 1994 was directed to the site sewage treatment facility.
3. The discharge temperatures were higher than normal (but within permit limits) for short periods for March 1994, on occasions when the Unit 1 facility reversed flow in the intake and discharge tunnels. Reverse flow was initiated several times during March when ice was brought in from Lake Ontario. On one occasion, on March 19, 1994, while in the process of returning to normal flow (also due to severe icing conditions), the condenser intake/station discharge delta temperature exceeded the permit limitation of 35°F. A maximum delta T of 40°F was reached and the duration of the non-compliance was no more than 162 seconds. This occurrence was caused by the inability to fully close required gates. While care was taken to ensure proper gate operation, this occurrence was not avoidable due to the extent of the icing conditions. Considering the short duration, there is no environmental impact from this event.

The Permittee is currently in the process of reviewing the draft SPDES Permit. A footnote will be drafted and included with the Permittee's comments that will allow for minor events where the limitation is exceeded for short periods of time during canal reverse flow or return to normal flow operations.



DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MARCH 1994

(continued)

4. 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 March 1994, due to testing/calibration. Maximum water use and/or temperature data were used during these periods.
5. Copper discharged from the Unit 2 Circulating Water System during March 1994 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during March 1994 ranged from 51 ppb to 377 ppb (137 ppb average) total copper.

The total copper concentration in Lake Ontario during March 1994 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. The copper concentration in Lake Ontario ranged from 0.1 ppb to 3.5 ppb (2.7 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during March 1994.

6. Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on March 8, 1994. 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.
7. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 Service Water System during March 1994. 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.
8. On the attached SPDES/DMR forms "NODI C" was noted for Unit 1 Outfall 010 and Unit 2 Outfall 040 as there were no Clam-Trol additions during March 1994. Also, for Unit 2 Outfall 041, since all pH analyses fell within the 6.0 to 9.0 range, "NODI C" was noted for the pH range of 4.0 to 9.0.



SECTION 1

New York State Department of Environmental Conservation
Division of Water



Report of Noncompliance Event

To: DEC Water Contact: William McCarthy DEC Region: 7

Report Type: 5 Day Permit Violation Order Violation Anticipated Noncompliance Bypass/Overflow

SECTION 2

SPDES #: NY-000-1015 Facility: Nine Mile Point Nuclear Station

Date of noncompliance: 03 / 19 / 94 Location (Outfall, Treatment Unit, or Pump Station): 010

Description of noncompliance(s) and cause(s): At approximately 0430 hrs. on 03/18/94, Unit 1 entered a reverse flow configuration (for the purpose of de-icing). At approximately 0345 hrs. on 03/19/94 while returning to normal flow configuration (again for de-icing), the Control Room recorder indicated a ΔT of 40°F, which exceeds the SPDES Permit limit of 35°F. This condition lasted for no more than 162 seconds. This was caused by a situation where required gates could not be fully closed

(Continued on reverse side)
Has event ceased? (Yes) (No) If so, when? 03/19/94 Was event due to plant upset? (Yes) (No) ^{SPDES limits} SPDES limits violated? (Yes) (No)

Start date, time of event: 03 / 19 / 94, 03 : 45 (AM) (PM) End date, time of event: 03 / 19 / 94, 03 : 47 (AM) (PM)

Date, time oral notification made to DEC? 03/24 / 94, 16 : 00 (AM) (PM) DEC Official contacted: William McCarthy

Immediate corrective actions: The required gates were able to be fully closed after a period of time.

Preventive (long term) corrective actions: Due to the difficult environmental conditions (during severe icing) this situation was unavoidable. Therefore, NMPC will request a change to our SPDES Permit to allow a higher ΔT for short periods of time during flow mode changes.

SECTION 3

Complete this section if event was a bypass:

Bypass amount: _____ Was prior DEC authorization received for this event? (Yes) (No)

DEC Official contacted: _____ Date of DEC approval: _____

Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.

SECTION 4

Facility Representative: Hugh J. Almaguer Title: Supv. Env Prot. Date: 4, 26, 94

Phone #: (315) 349 - 2428 Fax #: (315) 349 - 2371

SECTION 2: (Continued)

in a timely manner. The failure of the gates to fully close in a timely manner is not fully understood but was not due to personnel error.

DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
APRIL 1994

COMMENTS

1. There was one discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during April 1994. The discharge was initiated on April 6, 1994, and continued at a rate of approximately 7.3 gpm into April 10, 1994. The discharge consisted of demineralized water. The volume discharged was approximately 38,000 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 1994, due to testing/calibration. Maximum water use and/or temperature data were used during these periods.
3. Copper discharged from the Unit 2 Circulating Water System during April 1994 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during April 1994 ranged from 44 ppb to 161 ppb (88 ppb average) total copper.

The total copper concentration in Lake Ontario during April 1994 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. The copper concentration in Lake Ontario ranged from 0.3 ppb to 3.9 ppb (2.0 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during April 1994.

4. Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on April 8, 1994. 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.



•
•
•

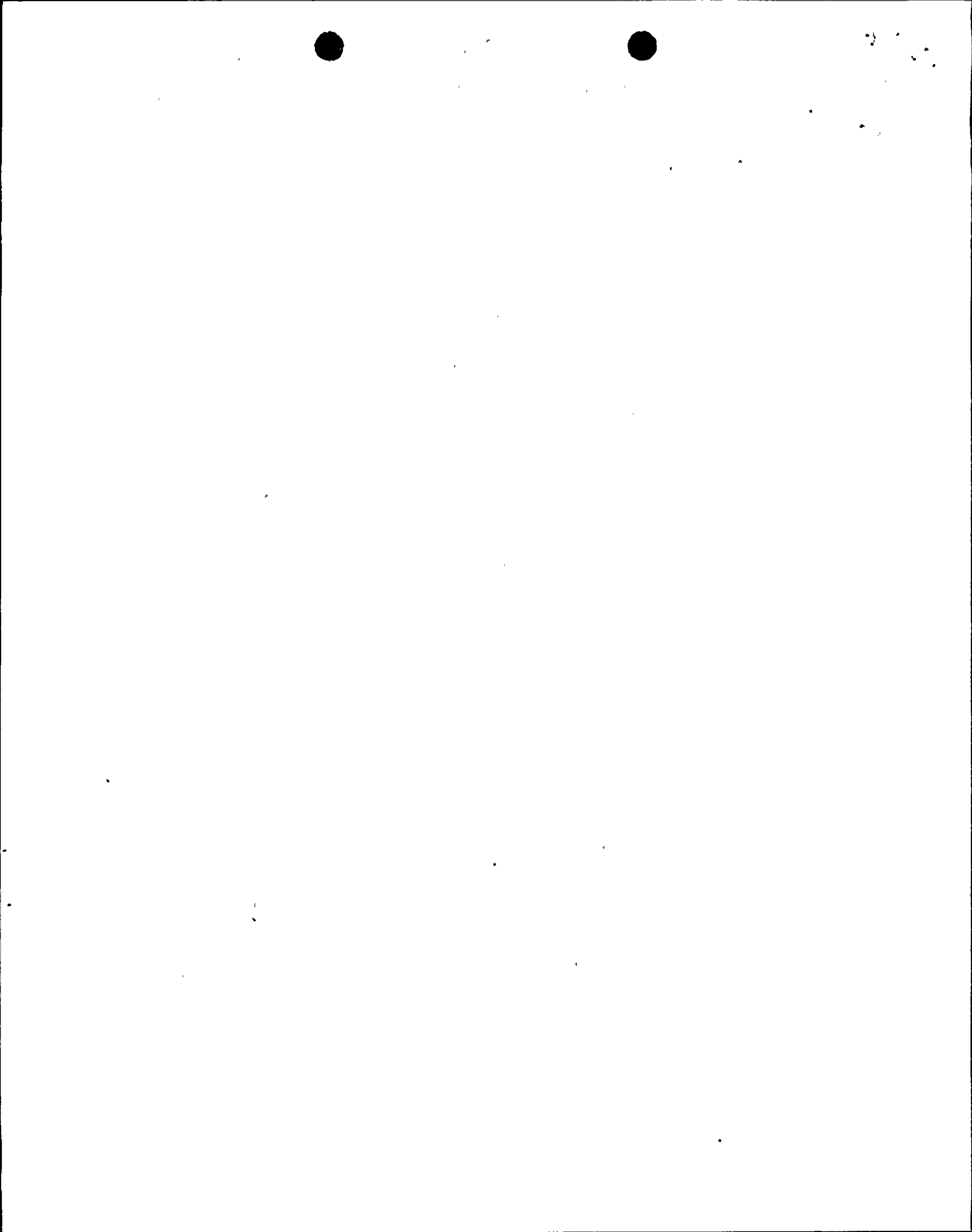
**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
APRIL 1994**

COMMENTS Continued

5. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 Service Water System during April 1994. 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.

6. On the attached SPDES/DMR forms "NODI C" was noted for Unit 1 Outfall 010 and Unit 2 Outfall 040 as there were no Clam-Trol additions during April 1994. Also, for Unit 2 Outfall 041, since all pH analyses fell within the 6.0 to 9.0 range, "NODI C" was noted for the pH range of 4.0 to 9.0.

(HJF94.045)



**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MAY 1994**

COMMENTS

1. There was one discharge from the Unit 2 Waste Neutralizing Tank to the Site Sewage Treatment Plant during May 1994. The discharge was initiated on May 18, 1994, and continued at a rate of approximately 6.5 gpm into May 24, 1994. 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. 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 1994. Any discharge during May 1994 was directed to the site sewage treatment facility.
3. On May 3, 1994, 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 <5 mg/liter oil and grease. Samples for total suspended solids and pH were also obtained and provided results of 3.5 mg/liter and 7.2 respectively. The volume discharged was approximately 103,880 gallons of water.
4. 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 1994, due to testing/calibration. Maximum water use and/or temperature data were used during these periods.
5. Copper discharged from the Unit 2 Circulating Water System during May 1994 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during May 1994 ranged from 45 ppb to 60 ppb (51 ppb average) total copper.



**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
MAY 1994**

COMMENTS Continued

The total copper concentration in Lake Ontario during May 1994 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. The copper concentration in Lake Ontario ranged from 1.2 ppb to 1.7 ppb (1.4 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during May 1994.

6. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 Service Water System during May 1994. 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.
7. On the attached SPDES/DMR forms "NODI C" was noted for Unit 1 Outfall 010 and Unit 2 Outfall 040 as there were no Clam-Trol additions during May 1994. Also, for Unit 2 Outfall 041, since all pH analyses fell within the 6.0 to 9.0 range, "NODI C" was noted for the pH range of 4.0 to 9.0.



2000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

**DISCHARGE MONITORING REPORT
PERMIT NUMBER NY-000-1015
NINE MILE POINT NUCLEAR STATION
JUNE 1994**

COMMENTS

1. 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 1994. Any discharge during June 1994 was directed to the site sewage treatment facility.
2. Copper discharged from the Unit 2 Circulating Water System during June 1994 is believed to have originated from copper loss from the Admiralty brass condenser tubes. Copper concentration in the Circulating Water System during June 1994 ranged from 45 ppb to 69 ppb (57 ppb average) total copper.

The total copper concentration in Lake Ontario during June 1994 was maintained below 17 ppb as a result of the discharge of water from the Unit 2 Circulating Water System. The copper concentration in Lake Ontario ranged from 0.9 ppb to 2.1 ppb (1.4 ppb average) total copper. The discharge of the Unit 2 Circulating Water System was through the normal system blowdown pathway during June 1994.

3. Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 Circulating Water System on June 1, 1994. 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.
4. Betz Slimicide C-94, a bromine based biological fouling control chemical, was added to the Unit 2 Service Water System during June 1994. 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.
5. On the attached SPDES/DMR forms "NODI C" was noted for Unit 1 Outfall 010 and Unit 2 Outfall 040 as there were no Clam-Trol additions during June 1994. Also, for Unit 2 Outfall 041, since all pH analyses fell within the 6.0 to 9.0 range, "NODI C" was noted for the pH range of 4.0 to 9.0.
6. Please note that in the DMR Report submitted for April 1994 (dated May 24, 1994) one discharge for Outfall 041 (Unit 2 wastewater) was inadvertently omitted from inclusion in the April Report. Therefore, the maximum pH value (for pH range 6-9) should have been 8.6 and not 7.1 as originally reported.

