

B. Garvey
R. Baker
R. Spear
Oswego County Hlth. Dept.
Niagara Mohawk - Lycoming
DRA - R7

Effective Date (ED) : July 1, 1983

Expiration Date (ExDP) : July 1, 1988

Mr. Geisendorfer, Rm. 308, BWFD
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
DISCHARGE PERMIT

Special Conditions
(Part I).

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").

Permittee Name: Niagara Mohawk Power Corp.

Attn: Mr. J. M. Toennies,
Env. Affairs Director

Permittee Street: 300 Erie Boulevard West

Permittee City: Syracuse

State: N.Y.

Zip Code: 13202

is authorized to discharge from the facility described below:

Facility Name: Nine Mile Pt. Nuclear Generating Station Units #1 and 2

Facility Location (C,T,V): Scriba (T)

County: Oswego

Facility Mailing Address (Street): Lake Road

Facility Mailing Address (City): Lycoming (T)

State: N.Y.

Zip Code: 13093

into receiving waters known as:

Lake Ontario Class A Special

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

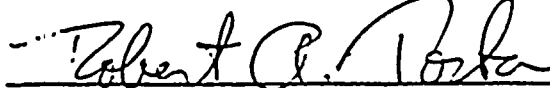
This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal as prescribed by Sections 17-0803 and 17-0804 of the Environmental Conservation Law and Parts 621, 752, and 755 of the Departments' rules and regulations.

By Authority of Alternate Permit Administrator

Designated Representative of Commissioner of the
Department of Environmental Conservation

6-6-83

Date



Signature

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning July 1, 1983
and lasting until July 1, 1988

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

<u>Outfall Number & Effluent Parameter</u>	<u>Discharge Limitations</u>		<u>Units</u>	<u>Monitoring Reqmts.</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
<u>010 Condenser Cooling Water Unit #1</u>					
Flow*				Continuous	Calculated
Discharge Temperature		115	OF	Continuous	Metered
Intake - Discharge Temperature Difference ^a		35	OF	Continuous	Metered
Net Rate of addition of heat ^a		1.11	10 ⁹ kcal/hr.	Hourly	Calculated
Cyanide ^d		0.1	mg/l	Monthly	12.-hr. Composit

011 Unit #1 Wastewater

Flow*	Batch			Calculated
	Batch before discharge			
Oil and Grease		.15	mg/l	Grab
Suspended Solids	.30	50	mg/l	"
pH	6.0 - 9.0 (Range) ^e			"
Cyanide ^d	0.4		mg/l	"

020 Storm Drainage (No Monitoring Required) Unit #1021 Filter Backwash & Makeup Demineralizer Water Supply

Flow*				Batch	Calculated
Oil & Grease		15	mg/l	Batch each	Grab
Suspended Solids	30	50	mg/l	" discharge	"
pH	6.0 - 9.0 (Range)		SU	"	"

022 Security Building Air Conditioning ^b

Oil and Grease		15	mg/l	Bimonthly	Grab
Suspended Solids	30	50	mg/l	"	"
pH	6.0 - 9.0 (Range)		SU	"	"

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with initiation of preoperational testing (Unit #2) and lasting until EDP + 5 Years the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Monitoring Reqmts.	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>001-006 Storm Drainage (No Monitoring Required)</u>					
<u>007 Floor and Equipment Drains</u>					
Oil and Grease		15	mg/l	2/Month	Grab
Suspended Solids	30	50	mg/l	"	"
pH	6.0 - 9.0 (Range)		SU	"	"
<u>008 Screen Well Fish Diversion System (No Monitoring Required)</u>					
<u>040 Cooling Tower Blowdown (Unit #2)^c</u>					
Flow*				Continuous	Recorder
Discharge Temperature		110(43.3)	°F(°C)	"	"
Intake - Discharge Temperature Difference		30(16.7)	"	"	"
Net Addition of Heat		0.12 x 10 ⁹	kcal/hr.	Daily	Calculated
Total Residual Chlorine	0.2	0.5	mg/l	Continuous	Recorder
pH	6.0 - 9.0 (Range)		SU	2/Week	Grab
<u>041 Unit #2 Wastewater (Including Demineralizer Regeneration Wastes, Filter Backwash, Floor Drains, & Treated Radioactive Wastes^e.)</u>					
Flow*				Batch	Calculated
Oil and Grease		15	mg/l	"	Grab (once before discharge)
Suspended Solids	30	50	mg/l	"	"
pH	6.0 - 9.0 (Range)		SU	"	"

FOOTNOTES

*Monitoring Requirement Only

^aThe intake temperature shall be considered that temperature existing after intake water tempering.

^bThese limits and monitoring requirements shall not apply if this wastewater is discharged upstream of the sewage treatment facility.

^cThere 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.

^dMonitoring and limits may be deleted following DEC evaluation of monitoring data.

^epH range of 4.0 - 9.0 is allowable for wastewater having a conductivity of less than:

EFFLUENT LIMITATIONS

Part I
Page of 17
Facility I.D. No. NY 000 1015

During the period beginning EDP and lasting until EDP + 5 Years discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

TABLE I

Outfall Number	Effluent Limitations (Maximum Limits except where otherwise indicated)			
030	(X) Flow	30 day arithmetic mean	65,000 ()MGD	(X)GPD
	(X) BOD ₅	30 day arithmetic mean	25 mg/l and	lbs/day (1)
	() BOD ₅	7 day arithmetic mean	mg/l and	lbs/day
	(X) BOD ₅	Daily	45 mg/l and	lbs/day
	() UOD ₅ (2)	Daily	mg/l and	lbs/day
	(X) Suspended Solids	30 day arithmetic mean	25 mg/l and	lbs/day (1)
	() Suspended Solids	7 day arithmetic mean	mg/l and	lbs/day
	(X) Suspended Solids	Daily	45 mg/l and	lbs/day
	(X) Effluent disinfection required: (X) all year			
	() Seasonal from _____ to _____			
	Fecal Coliform 30 day geometric mean shall not exceed 200/100 ml			
	Fecal Coliform 7 day geometric mean shall not exceed 400/100 ml			
	Fecal Coliform 6 hour geometric mean shall not exceed 800/100 ml (3)			
	Fecal Coliform No individual sample may exceed 2400/100 ml (3)			

The chlorine residual in the final discharge

shall not exceed	0.5 mg/l.	
() Total Coliform	Daily	/100 ml
() Total Kjeldahl Nitrogen	Daily	/mg/l as N
() Ammonia	Daily	/mg/l as NH ₃
() Dissolved Oxygen	Minimum	greater than _____ mg/l
(X) pH	Range	6.0 to 9.0
(X) Settleable Solids	Daily	0.1 ml/l
() Phosphorus	Daily	mg/l as P
() Total Nitrogen	Daily	mg/l as N
()		

Monitoring Requirements

TABLE 2

Parameter	Frequency	Sample Type	Sample Location	
			Influent	Effluent
(X) Total Flow, MGD	2/Month	Grab		
(X) BOD ₅ , mg/l	"	"		
(X) Suspended Solids, mg/l	"	"		
(X) Fecal Coliform, No./100 ml	"	"		
() Total Coliform, No./100 ml				
() Total Kjeldahl Nitrogen, mg/l as N				
() Ammonia, mg/l as NH ₃				
() Dissolved Oxygen, mg/l				
(X) pH	2/Month	Grab		
(X) Settleable Solids, ml/l	"	"		
(X) Residual Chlorine, mg/l	"	"		X
() Phosphorus, mg/l as P				
() Temperature, °C				
() Total Nitrogen, mg/l as N				
() Visual Observation				
()				

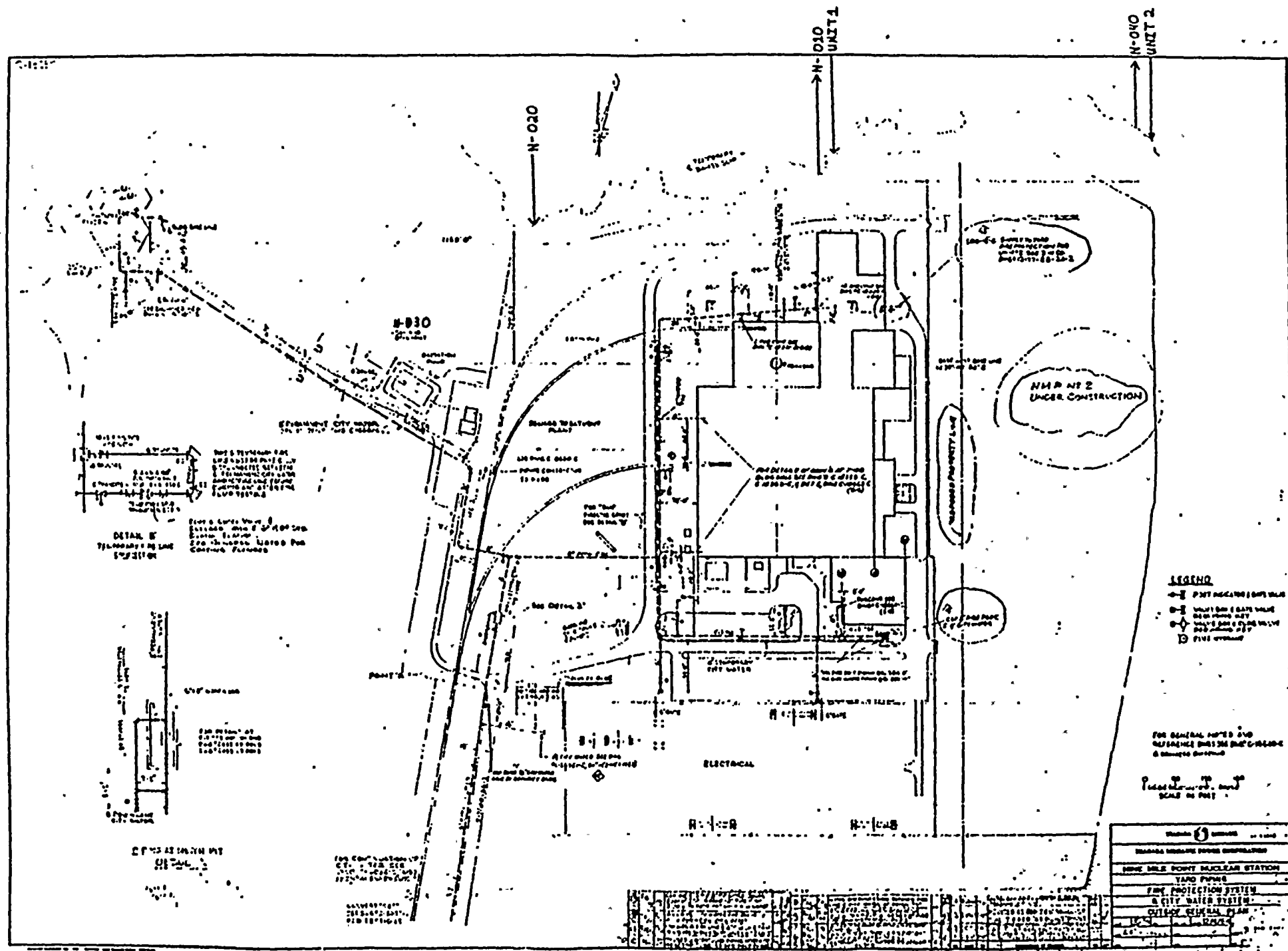
(1) and effluent values shall not exceed _____ % of influent values.

(2) UOD (Ultimate Oxygen Demand) shall be computed and reported as follows:

$$UOD = 1\frac{1}{2} \times BOD_5 + 4\frac{1}{2} \times TKN \text{ (Total Kjeldahl Nitrogen).}$$

(3) applicable only in the Interstate Sanitation District.

(4) sample contact chamber effluent and final effluent if limits are specified for both.



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

1. There shall be no discharge of PCB's from this facility.
2. In regard to general conditions 11.5, items #3 and #4 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
 - a. Gross Beta - Shall not exceed 1,000 picocuries per liter in the absence of Sr^{90} and alpha emitters.
 - b. Radium 226 - Shall not exceed 3 picocuries per liter.
 - c. Strontium 90 - Shall not exceed 10 picocuries per liter.
5. The permittee shall submit on a trimesterly basis a report to the Department's offices in Cortland and Albany by the 28th of the month following the end of the period. Submission of reports for Unit #2 shall commence with the initiation of reactor low power testing.
 - a. Daily minimum, average, and maximum station electrical output shall be determined and logged.
 - b. Daily minimum, average, and maximum water use shall be directly or indirectly measured or calculated and logged.
 - c. Daily minimum, average, and maximum intake and discharge temperatures shall be logged.
 - d. Measurements in a, b, and c shall be taken on an hourly basis.
6. The location, design, construction, and capacity of cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact.
7. All thermal discharges to the waters of the state shall assure the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife in and on the body of water.

8. 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 Technical Specifications requirements which could in any way affect the requirements of this permit.
9. 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.
10. Niagara Mohawk shall provide access to the Nine Mile Point Site at any time to representatives of the Department subject to site security regulations to assess the environmental impact of the operation of the Nine Mile Point Nuclear Facility and to review any sampling program, methodology, and the gathering and reporting of any data.
11. No biocides, slimicides, or corrosion control chemicals are authorized for use, except for those listed by parameter in the 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.

II. The following requirements are applicable to Unit #1.

1. By August 1, 1983, the permittee shall submit final plans, signed and sealed by an engineer licensed to practice in New York State, describing the addition of storage capacity for discharges 011 and 021. Construction to be initiated by October 1, 1983.
2. The Department has approved the applicant's request pursuant to Section 316(a) of the Clean Water Act (CWA) for alternative effluent limitations at this facility. The thermal effluent limitations on page 2 of this permit reflect this approval.
3. 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.
4. The Department has contingently approved the applicant's consideration of intake impacts submitted pursuant to Section 316(b) of the CWA. Completion of the biological monitoring program described in Additional Requirement Section IV and demonstration of impacts similar to previous studies is required to obtain final approval of the 316(b) request.

III. The following requirements are applicable to Unit #2.

1. By initiation of reactor lower power testing, the company shall file for approval with the Department at its offices in Albany and Syracuse an updated report on all Unit #2 water treatment, corrosion inhibitor, anti-fouling, slimicide, biocide, and boiler cleaning chemicals or compounds. Such report shall identify each product by chemical formula and/or composition, annual consumption, frequency of use, maximum use per incident, effluent concentration, bioassay and toxicity limits, and procedures for use. Approval shall only be granted for those circumstances and uses which do not contravene New York State Water Quality Standards. No substitutions will be allowed without prior approval. Wastewaters containing chemicals and oil shall be collected and treated prior to dilution with non-contact cooling water in facilities which shall be approved by the Department.
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.
3. Pursuant to Part 704 Criteria Governing Thermal Discharges, Section 704.3-Mixing Zone Criteria, upon the presentation of a final design for the discharge, the Department shall specify, as appropriate, definable numerical limits for the mixing zone, including linear distances from the point of discharge, surface area involvement, and volume of receiving water entrained in the thermal plume.
4. Not less than 180 days prior to the initiation of discharge from the Nine Mile Point Nuclear Generating Station Unit #2, Niagara Mohawk shall submit for approval to the Department of Environmental Conservation a plan of study for:

Verification of the extent of the thermal plume in the receiving waters by conducting thermal surveys in alternate months except for December through March during the first two years of operation.

5. Existing biological studies in Lake Ontario as required by regulatory agencies shall continue. Such study programs shall be adjusted as required by regulatory agencies to assess the operating impact of Unit #2. Requirements to submit reports, frequency of submission, and content shall be established at the time of approval of the study programs.

6. Not less than 180 days prior to the initiation of discharges from the Nine Mile Point Nuclear Generating Station Unit #2, Niagara Mohawk shall submit to the NYSDEC office in Albany three copies of the following plans and specifications. Plans shall be stamped by an engineer licensed in New York State.
 - a. Plans of proposed structures, including intake structure, diffuser, tunnel cross section, cooling tower, screenwell building, and equipment (including pumps).
 - b. Plans of all on-site treatment facilities including oil/water separators.
 - c. Piping and/or flow diagrams for all facility waste streams, including any piping to or from Nine Mile Point Unit #1 and contaminated plant and site drainage.
 - d. Flow diagram of circulating cooling water system from the intake to the diffuser.

IV. Biological Monitoring and Related Matters - Unit #1

- A. Previous Biological Monitoring Data - EDP + 3 Months, the permittee shall file with the Chief, Bureau of Environmental Protection in Albany; Fishery Section head in Cape Vincent; and with the Regional Supervisor of Fish and Wildlife in Syracuse a report containing and/or identifying all previous reports regarding this facility 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 location must be completely identified. A copy of all unsubmitted reports and data shall be sent to the above offices by EDP + 3 Months. Data to be reported should include, but is not necessarily limited to cooling water flows, dates, times, available operating and meteorological conditions, and species, numbers and other available biological information.
- B. Impingement Monitoring - The permittee shall conduct a program to determine the numbers and total weights by species of fish impinged on all intake traveling screens.
 1. Collections shall be made seventy-eight (78) days each year, provided that the circulating water pumps are in operation. When collection days coincide with shut down of the main circulating water pumps, collections need not be taken. Collections shall be obtained at the following intensity on days randomly selected within each month. Should the randomly selected dates result in a period in excess of 10 days during any month in which sampling does not occur,

additional sampling is required so that periods in excess of 10 days without a sample do not occur.

<u>Month</u>	<u>Number of Sample Days</u>
January	4
February	4
March	4
April	16
May	20
June	4
July	4
August	6
September	4
October	4
November	4
December	4

2. Collections shall be conducted for a minimum period of 24 hours. The beginning of the 24-hour period shall be selected and held constant by the permittee for all collections. A collection period shall be no longer than 26 hours. Impingement collection shall be calculated and reported on a 24-hour basis.
3. Travelling screens shall be washed until they are clean prior to the start of the 24-hour collection period.
4. Individual length (cm) and weight (g) measurements shall be made on white perch, smallmouth bass, yellow perch, alewife, rainbow smelt, and each species of salmonid in order to characterize the size distribution for each 24-hour collection. No less than 25 organisms of each species shall be measured unless fewer than 25 individuals occur in the collection.

If more than 25 individuals of a single species are collected, except for smallmouth bass, yellow perch and each species of salmonid which are to be processed separately, a representative subsample of 25 fish shall be removed and lengths and weights recorded for the subsample. In the event of high impingement numbers, an estimate of the numbers and total weights by species fish shall be calculated as follows:

$$\text{Estimated No. of Fish} = \frac{(\text{Volume of Total Sample}) \times (\text{No. of Fish in Subsample})}{\text{Volume of Subsample}}$$

The total sample volume shall be determined by repeatedly filling a volumetrically graduated 20-gallon plastic container and then recording and summing the values. The total volume is then thoroughly mixed by hand or with a shovel and spread

out evenly over a flat surface. An aliquot of the total sample is randomly selected and this sample portion is removed from the flat surface and measured in the graduated container to determine its approximate volume. The total number of fish in the subsample is then determined.

In the event of extremely large impingement loads, the permittee may request regional staff to make adjustments to or suspend the above subsampling procedures.

5. Electrical output and operation of the condenser cooling water system including intake and discharge temperature and total flow shall be recorded on a daily basis and tabulated as required in the following section on reporting.
6. By EDP + 3 Months, the permittee shall file for approval at the office in Section IV.A. above, a plan which will determine the collection efficiency of the following impinged organisms: white perch, smallmouth bass, yellow perch, alewife, and rainbow smelt. Prior collection efficiency data specific to this plant may be substituted for the above plan provided that it is submitted by EDP + 3 Months, to the NYSDEC and approved by the NYSDEC.

C. Reporting

1. All data required by Section IV or incorporated by reference in Section IV shall be included in an annual biological monitoring report.
2. The annual report shall be submitted by six months from the last month of data collection.
3. The following shall be included in the annual report in addition to (1) above:
 - a. Monthly and annual totals of impingement by species and grand total over all species. The calculations to be done are as follows:
 - Monthly "mean" is equal to the total number of fish impinged by species on the sampling days in the month divided by the total number of sampling days.
 - Annual "mean" is equal to the total number of fish impinged by species on the sampling days in the year divided by the total number of sampling days.

Similar calculations shall be made for grand total over species. The total number of fish and sampling days shall be clearly indicated in any table reporting the "totals".

- b. An estimate of the collection efficiencies to be determined pursuant to Section IV.B.6. above. If sufficient time is not available to include these estimates in the first annual report, the permittee may, upon written request and substantiation and with NYSDEC approval, extend this reporting requirement into an annual report other than the initial.
 - c. Estimates shall be developed of the average monthly impingement rate based on the number of sampling days and total volume of water pumped during these days, and also of the total monthly impingement based on the average monthly rate and the volume of water pumped during the month, for each species impinged.
4. All measurements shall use the metric system, e.g., flows should be in cubic meters/sec. (m^3/s).
 5. Copies of all reports regarding water and biological parameters related to intake and discharge considerations, whether generated for this permit or otherwise, shall be sent to the offices in Section IV.A. above.
 6. Report(s) submitted in fulfillment of permit conditions shall clearly identify on the title page the permit number and the specific section(s) by character and number that the report(s) fulfill. Each section of the text of such report(s) shall identify the section(s) of the permit that it fulfills.
 7. NYSDEC reserves the right to have more frequent submittal of the data required to be reported, provided that the permittee is given at least one (1) month prior notice of such more frequent reporting requirements.
 8. The measures the permittee instituted, if any, in the reporting year to accomplish minimization of facility impacts on aquatic biota shall be sent to the offices in Section IV.A. above.
 9. The formats for reporting the following data are included in Appendix A. Data sheets and formats for reporting the following data:
 - a. Flow
 - b. Temperature
 - c. Circulator operation
 - d. Electrical output

are available from the office of Environmental Protection.

- D. Biological specimens may be required to be submitted to the NYSDEC upon request.
- E. The facility shall be operated in such a manner as to minimize facility impacts on aquatic biota.
- F. As a result of the NYSDEC's review of the biological monitoring program, the permittee may be required to implement appropriate methods and procedures to reduce to the fullest extent possible the effects of facility operation on aquatic organisms.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

<u>Action Code</u>	<u>Outfall Number(s)</u>	<u>Compliance Action</u>	<u>Due Date</u>
02	011 & 021	Approvable Final Plans-Waste Storage Tanks (Additional Requirement # II.1.)	8/1/83
04	011 & 021	Commencement of Construction (Additional Requirement #II.1)	10/1/83
01	A11	Chemical Use Report-Unit #2 (Additional Requirement #III.1)	Initiation of reactor low power testing.
44	040	Plan of Study-Thermal Plume Verification (Additional Requirement #III.4).	180 days prior to initiation of discharge.
02	040	Final Plans-Circulating Cooling Water & Waste Treatment (Additional Requirement #III.6)	180 days prior to initiation of discharge.
39	NA	Compilation of Reports containing Biological Data (Additional Requirement #IV.1.a)	EDP + 3 Months
44	NA	Plan of Study-Collection Efficiency (Additional Requirement #IV.6)	EDP + 3 Months

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

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 and reported by submitting a completed and signed Discharge Monitoring Report form once every months to the Department of Environmental Conservation and other appropriate regulatory agencies at the offices specified below. The first report will be due no later than Thereafter, reports shall be submitted no later than the 28th of the following month(s):

Water Division
New York State Department of Environmental Conservation
50 Wolf Road - Albany, New York 12233

New York State Department of Environmental Conservation
Regional Engineer
7481 Henry Clay Blvd.
Liverpool, New York 13088

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

☒ (Applicable only if checked):

Dr. Richard Baker, Chief - Permits Administration Branch
Planning & Management Division
USEPA Region II
26 Federal Plaza
New York, New York 10278

c) If so directed by this permit or by previous request, Monthly Wastewater Treatment Plant Operator's Reports shall be submitted to the DEC Regional Office and county health department or county environmental control agency specified above.

d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Reports.

f) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

g) Unless otherwise specified, all information submitted on the Discharge Monitoring Form shall be based upon measurements and sampling carried out during the most recently completed reporting period.

h) Blank Discharge Monitoring Report Forms are available at the above addresses.

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS
(Continued)

c) The permittee shall submit copies of the written notice of compliance or noncompliance required herein to the following offices:

Chief, Compliance Section
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

Regional Engineer #7
New York State Department of Environmental Conservation
7481 Henry Clay Boulevard
Liverpool, NY 13088

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

USEPA Region II
Planning and Management Division
26 Federal Plaza
New York, New York 10278

The permittee shall submit copies of any engineering reports, plans of study, final plans, as-built plans, infiltration-inflow studies, etc. required herein to the New York State Department of Environmental Conservation Regional Office specified above unless otherwise specified in this permit or in writing by the Department or its designated field office.

91-18-2 (9/76)

SPDES MONTHLY REPORT

Summary of Excursions

Station Nine Mile Point Unit #1 Month March Year 1983

Type of Discharge Wastewater Batch Discharge

Discharge Serial Number 011

Parameter pH

Permit Limit Range of 6.0-9.0 Reported Value 5.71

A. Cause of non-compliance: Discharge of low conductivity demineralized water showed pH of 5.71. The discharge was made on 3/27/83.

B. A description of the non-complying discharge including its impact upon the receiving water: Low conductivity demineralized water was discharge at a pH of 5.71. Because of the low conductivity (1.6 $\mu\text{mho/cm}$), the pH of this batch of demineralized water was less than the SPDES Permit range of 6.0-9.0 (pH was 5.71). No impact on receiving water because of the high purity of the wastewater and the rapid adjustment to a pH greater than 6.0 (in the plant discharge canal) prior to entering Lake Ontario.

C. Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance: Does not apply - see D below

D. Steps taken by the permittee to reduce and eliminate the non-complying discharge: As a result of a meeting between the NYSDEC and Niagara Mohawk on Feb. 16, 1983, verbal permission was given by the DEC to discharge low conductivity wastewater (less than 10 $\mu\text{mho/cm}$) at a pH range of 4.0-9.0. Verbal authorization was reaffirmed on 3/14/83 as a result of a telephone conversation between the NYSDEC (Kathleen DelPrete, DEC Liverpool, NY) and Hugh Flanagan (Niagara Mohawk, Nine Mile Point).

E. Steps taken by the permittee to prevent recurrence of the condition of non-compliance: Does not apply - see D above

SPDES MONTHLY REPORT

Summary of Excursions

Station Nine Mile Point Unit #1 Month May Year 1983

Type of Discharge Low Volume Wastewater

Discharge Serial Number 011

Parameter pH

Permit Limit	<u>6.0-9.0</u>	Reported Value	<u>5.31 (5/23/83)</u>
			<u>5.18 (5/26/83)</u>

A. Cause of non-compliance: Discharge of low conductivity condensate wastewater showed a pH of 5.31 (5/23/83) and 5.18 (5/26/83). Wastewater conductivity on 5/23/83 was 1.45 μ mho/cm (pH of 5.31) and on 5/26/83 was 0.85 μ mho/cm (pH of 5.18).

B. A description of the non-complying discharge including its impact upon the receiving water: Low conductivity condensate water has a low pH as a result of the high purity. No impact on the receiving water because of the high purity of the wastewater and the rapid adjustment to a pH greater than 6.0 (in the plant discharge canal) prior to entering Lake Ontario.

C. Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance: DOES NOT APPLY - SEE "D" BELOW.

D. Steps taken by the permittee to reduce and eliminate the non-complying discharge: No action taken. As a result of a meeting between the NYSDEC and Niagara Mohawk on Feb. 16, 1983, verbal permission was given by the DEC to discharge low conductivity wastewater (less than 10 μ mho/cm) at a pH range of 4.0-9.0. Verbal authorization was reaffirmed on 3/14/83 as a result of a telephone conversation between K. DelPrete (DEC) and H. Flanagan (NMPC).

E. Steps taken by the permittee to prevent recurrence of the condition of non-compliance: - DOES NOT APPLY - SEE "D" ABOVE.

SPDES MONTHLY REPORT

Summary of Excursions

Station Nine Mile Point Unit 1 Month June Year 1983

Type of Discharge Sewage Treatment Plant

Discharge Serial Number 030

Parameter Residual Chlorine in Contact Chamber

Permit Limit 0.5-2.0 (range) mg/l. Reported Value 1.0-6.0 (range) mg/l.

A. Cause of non-compliance: Residual chlorine level in sewage treatment plant contact chamber exceeded the station's SPDES Permit level of 2.0 mg/liter. Residual chlorine concentration in contact chamber greater than 2.0 mg/liter is necessary to maintain residual concentration in oxidation pond to control fecal coliform levels. Permission given by DEC on Feb. 16, 1983 to exceed contact chamber residual chlorine level while maintaining final effluent limits of oxid. pond.

B. A description of the non-complying discharge including its impact upon the receiving water: Residual chlorine concentration in contact chamber showed results of 2.0, 1.6, 1.0 and 6.0 mg/liter respectively. Result of 6.0 exceeded permit limit of 2.0 mg/liter. No impact on receiving water (Lake Ontario) since residual chlorine at oxidation pond (down stream of contact chamber and prior to receiving water) showed results to be within permit limits.

C. Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance: Condition of non-compliance expected to continue as long as algal growth occurs in oxidation pond and as long as oxidation pond is utilized (algal growth requires increased chlorination levels to control fecal coliform levels).

D. Steps taken by the permittee to reduce and eliminate the non-complying discharge: Permittee petitioned DEC to delete residual chlorine limits in contact chamber since final effluent from sewage plant is monitored at oxidation pond. This request was granted and is effective 7/1/83.

E. Steps taken by the permittee to prevent recurrence of the condition of non-compliance: See D above.

SPDES MONTHLY REPORT

Summary of Excursions

Station Nine Mile Point Unit #1 Month June Year 1983

Type of Discharge Sewage Treatment Plant

Discharge Serial Number 030

Parameter Suspended Solids

Permit Limit 25 mg/l (avg.) Reported Value 61 mg/l (avg.)
45 mg/l. (max.) 78 mg/l. (max.)

A. Cause of non-compliance: Suspended solid levels of outfall from sewage treatment plant (oxidation pond discharge) showed results that exceeded the stations SPDES Permit limit.

B. A description of the non-complying discharge including its impact upon the receiving water: Suspended solid samples taken at discharge of oxidation pond showed 78 mg/liter (monthly maximum) and 61 mg/liter (monthly average). High suspended solid levels are a result of significant algal growth in oxidation pond. No significant impact on receiving water (Lake Ontario) from the natural algal growth.

C. Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance: Condition of non-compliance is expected to continue throughout the summer months. DEC approved by-pass will be installed this summer which will eliminate algal problem.

D. Steps taken by the permittee to reduce and eliminate the non-complying discharge: NYSDEC (Kathleen DelPrete) was notified of the problem (high suspended solid levels as a result of the algal growth) as soon as the results were available. DEC indicated that they are aware of the natural algal growth and no action will be taken on the part of the DEC at this time.

E. Steps taken by the permittee to prevent recurrence of the condition of non-compliance: See D above.

