DISCHARGE MONITORING REPORT
PERMIT NUMBER NY0001015
NINE MILE POINT NUCLEAR STATION
JUNE 1990

COMMENTS

1. There were no discharges from the Unit 2 Waste Neutralizing Tank to the Sewage Treatment Facility during June 1990.

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 June 1990. Any discharge during June was directed to the sewage treatment facility.

3. On June 19, 1990, the Unit 2 strip chart input channel which records outfall 040 (Cooling Tower Blowdown) discharge flow was intermittently inoperable for approximately 9.4 hours due to a problem with the recorder drive mechanism. Flow data for the period were estimated from the hours immediately preceding and following the lapse as the pump flows were consistent.

4. On June 19, 1990, the Unit 1 oil spill catchment basin was discharged because the basin was near its maximum design level requiring discharge. 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 3.3 mg/liter oil and grease. Total suspended solids and pH were 10.6 mg/liter and 8.4 respectively. The volume discharged was approximately 95,000 gallons of water.

5. The following summary comment concerns the discharge of water from the Unit 2 circulating water system (outfall 040). The discharge was initiated on November 2, 1989 under an Emergency Authorization issued by the NYSDEC for the discharge of copper contaminated water. Details of the discharge during November and December 1989 are provided in the comment sections of the November and December Discharge Monitoring Reports.

   During the first half of 1990, the discharge of 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 blowdown 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 NY0001015
NINE MILE POINT NUCLEAR STATION
JUNE 1990

Any copper discharged from the circulating water system during June 1990 is believed to have originated from copper precipitated onto the carbon steel and concrete structures within the circulating water system and, to a smaller extent, from normal copper loss from the Admiralty brass condenser tubes. The source of the precipitated copper originated from the acid leak into the circulating water system in October 1989. Copper concentrations during June 1990 ranged from 157 to 220 ppb (202 ppb average) total copper and 111 to 182 ppb (154 ppb average) soluble copper. The Unit 2 facility operated at or near full power during June 1990.

Copper-Trol, an azole based copper corrosion inhibitor, was added to the Unit 2 circulating water system on June 8, 1990. The addition followed the requirements of the NYSDEC as contained in Niagara Mohawk's request dated September 11, 1989 (NMP-53843), 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 1990 was maintained below 17 ppb as a result of the discharge of the Unit 2 circulating water system. Copper concentrations ranged from 0.9 to 6.7 ppb total copper. The discharge of the Unit 2 circulating water system was through the normal station blowdown pathway and through the Unit 1 facility circulating water system during June 1990.

There were no occasions during June 1990 when the temporary piping from the Unit 2 circulating water system to the Unit 1 intake canal developed significant leaks.

(DISCHMON.JUN)