



THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

P.O. BOX 97 ■ PERRY, OHIO 44081 ■ TELEPHONE (216) 259-3737 ■ ADDRESS-10 CENTER ROAD
FROM CLEVELAND: 241-1650

Serving The Best Location in the Nation
PERRY NUCLEAR POWER PLANT

Al Kaplan

VICE PRESIDENT
NUCLEAR GROUP

September 26, 1989
PY-CEI/OEPA-0087 L

Mr. Ermelindo Gomes
Environmental Engineer
Division of Water Pollution Control
Ohio EPA, Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: 9/21/89 Sulfuric Acid Incident at the Perry Nuclear Power Plant

Dear Mr. Gomes:

This letter provides a follow up to the telephone notification made to the EPA on September 21, 1989, concerning an incident at the Perry Nuclear Power Plant (OEPA Incident Report No. 09433722). The incident occurred when sulfuric acid was manually added to the plant's Circulating Water System (Cooling Tower) at an excessive rate. The acid was added directly from a tank truck to the cooling tower basin. The plant Acid Addition System which normally performs this function was out of service for maintenance.

The direct addition of acid is normally controlled at a flow rate of one (1) gallon per minute (gpm). As a result of this incident three thousand (3000) gallons of 93.4 percent sulfuric acid were added to the basin in approximately a half hour period (flow rate 100 gpm). It is also estimated that most of the sulfuric acid was discharged through the Service Water System to Lake Erie (via Circulating Water System blowdown). The quantity released exceeded the Reportable Quantity (RQ) listed in 40 CFR Part 302 of one thousand (1000) pounds. It should be noted that this release is considered an "excursion" of an unintentional and temporary nature, pursuant to 40 CFR Part 401.17(a)(2), and should not be considered a violation of the regulations.

Incident investigation determined that the sulfuric acid was added to the cooling tower basin by plant operators roughly between 6:30 and 7:00 A.M. on 9/21/89. From a continuous pH recorder, it was determined that the pH of the plant discharge water at Outfall No. 3IB00016004 fell below the NPDES Permit (OEPA Permit No. 3IB00016*CD) limit of 6 S.U. for approximately forty-five (45) minutes, between 7:45 and 8:30 A.M. that morning, reaching a minimum of 2.4 S.U. for about fifteen (15) minutes of that duration. Prior to its release, the sulfuric acid was diluted by water from the Circulating Water, Service Water, and Emergency Service Water Systems. The flow rate of the outfall during the release was approximately fifty thousand (50,000) gallons per minute (gpm). The excessive acid addition was later identified by other plant personnel and reported to the control room supervisor at 10:42 A.M..

IE23
11

8910040337 890926
PDR ADDCK 05000440
S PNU

Mr. E. Gomes

-2-

September 26, 1989
PY-CEI/OEPA-0087 L

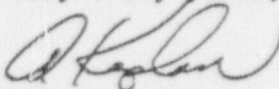
A comprehensive survey of the Lake Erie shoreline was conducted on 9/22/89 at the plant site, and at nearby beaches. No adverse visible effects were observed. In addition, the U.S. Coast Guard, which was assisting a pleasure craft near the plant's discharge structure, reported no abnormal observations in the area, after being contacted.

The cause of this incident was the lack of a procedure that clearly specified organizational interfaces and detailed operating instructions to ensure the activity was performed correctly. In addition, plant personnel performing this activity were not familiar with the flow rate limitations and abnormal system lineup.

As a result of this incident, maintenance on the plants permanently installed Acid Addition System was accelerated, and the system was returned to service. This ensures a proper flow rate of acid. In addition, applicable plant procedures will be reviewed and revised to ensure proper organizational interfaces and limitations are clearly specified for the manual addition of sulfuric acid to the Circulating Water System. Also, appropriate plant personnel will be counseled on the circumstances surrounding this incident, including the need to ensure that personnel are not assigned to perform activities without adequate training and procedural direction.

Please contact me if you have any questions.

Very truly yours,



Al Kaplan
Vice President
Nuclear Group

AK:njc

cc: Document Control Desk, USNRC

Lake County Emergency Planning Committee
Attention: Mr. R. Retzler
P.O. Box 480
Mentor, Ohio 44061