

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET
P.O. BOX 8699
PHILADELPHIA, PA. 19101
(215) 841-4000

December 7, 1989

Mr. Robert Bauer, Jr.
Department of Environmental Resources
Bureau of Water Quality Management
1875 New Hope Street
Norristown, PA 19401

Subject: Cooling Tower Blowdown Manhole Overflow to Possum Hollow
Creek, Limerick Generating Station,
NPDES Permit No. PA-0051926

Dear Mr. Bauer:

On December 1, 1989 at 4:50 p.m. oral notification was given to Mr. Lee Gemmill of the Department of Environmental Resources regarding unpermitted discharge of cooling water to Possum Hollow Creek.

The overflow condition was a result of high water level in the Unit 2 Cooling Tower. Unit 2 reactor was shut down at 12:30 p.m. on December 1, 1989. Preparations for routine de-icing of the Cooling Tower were started by placing the tower in "winter bypass mode". This procedure involved redirecting cooling water from the tower raceway directly to the tower basin. This change in operating mode prevented the evaporation loss of water normally experienced in standard cooling tower operation. The elimination of evaporative loss of water and subsequent increase in Unit 2 cooling tower water level, combined with blowdown from the Unit 1 cooling tower, increased the blowdown rate to create the overflow condition.

At approximately 1:30 p.m. water overflowed through a vented manhole upstream of the normal final discharge point (001). The water entered the Possum Hollow Creek roughly 100 yards upstream from the Schuylkill River. An estimated 11,000 gallons were discharged to Possum Hollow before water level in the cooling tower was returned to normal. While the discharge was not from a permitted point, a sample of the discharge showed the water to be within NPDES permit limits for outfall 001. The discharge ended at or before 2:30 p.m. with a discharge duration of approximately 1 hour.

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Converting the cooling tower "winter bypass mode" involves several valve manipulations which take about 30 minutes to complete. It was during this time period that the level in the tower rose above normal operating level.

The cause of this noncompliance was a procedural deficiency. This occasion was the first time that this procedure was used under two unit operation. The operational procedure will be revised to provide the necessary guidance to ensure that the cooling tower blowdown does not exceed the capacity of the normal discharge line. These actions are designed to prevent reoccurrence and will be completed by December 22, 1989.

Sincerely,



M. J. McCormick, Jr.
Plant Manager

RSU:kaa

cc: U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Administrator Region I
Office of Inspections and Enforcement
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Station Resident NRC Inspector
Tom Kenny, M.C. #NRC

Program Management Section (3WM52)
Permits Enforcement Branch
Water Management Division
Environmental Protection Agency
Water Permits Section
Region III
841 Chestnut Building
Philadelphia, PA 19107