

ILLINOIS POLLUTION CONTROL BOARD  
October 24, 1985

COMMONWEALTH EDISON COMPANY,        )  
  )  
                  Petitioner,         )  
  )  
                  v.                     )                   PCB 85-162  
  )  
ILLINOIS ENVIRONMENTAL                )  
  PROTECTION AGENCY,                 )  
  )  
                  Respondent.         )

OPINION AND ORDER OF THE BOARD (by W. J. Nega);

This provisional variance request comes before the Board upon an October 23, 1985 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 30-day provisional variance be granted to Commonwealth Edison Company from 35 Ill. Adm. Code 304.124 as it pertains to total suspended solids (TSS) and oil while necessary repairs are being made to the Miscellaneous Wastewater Treatment Facility (MWWTP) at the Petitioner's Zion Generating Station. (Rec. 4). The Petitioner has requested interim effluent limitations of 75 milligrams per liter (mg/l) TSS and 75 mg/l oil during the time period that repairs and maintenance operations are performed.

Commonwealth Edison Company owns and operates the Zion Generating Station which is a nuclear-fueled steam electric generating station located on Lake Michigan in Zion, Illinois. Station wastewaters going to its Miscellaneous Wastewater Treatment Facility consist of (1) the fire sump discharge, and (2) station roof drainage. The fire sump discharge includes demineralizer filter backwash, turbine building floor and equipment drains, foundation seepage, auxiliary boiler blowdown, demineralized regenerate wastes, and secondary system monitoring drains. (Rec. 1-2). Treatment is customarily provided by a flow equalization basin, flocculator/clarifiers, and filters. These flows average 0.21 million gallons per day (MGD) and effluent is discharged into Lake Michigan. (Rec. 2).

The Petitioner is currently required by its NPDES Permit #IL0002763 to meet effluent limitations of 15 mg/l TSS on a 30 day average with a 30 mg/l daily maximum and 15 mg/l oil with a 20 mg/l daily maximum for its discharge. (Rec. 2). No recent effluent data was initially readily available because the Petitioner was not required to sample this discharge for TSS and oil. However, in telephone conversations on October 18, 1985 with Commonwealth Edison employee Mary Ellen DiPonzio, the Agency managed to gather information on the effluent in question. (Rec. 2). Samples were collected at the fire sump between October 1, 1985 and October 17, 1985 which have yielded the following results:

<u>TSS (mg/l)</u>	<u>Oil (mg/l)</u>
9.66	ND*
8.43	ND
7.16	ND
15.90	ND
50.50	144.6
36.30	77.7
24.00	2.47
31.10	0.72
53.10	4.53
23.50	0.84
17.85	11.5
17.44	7.7
15.10	ND
15.50	No Sample
12.30	2.29
12.40	2.3
11.90	1.21

(Rec. 2).

As previously indicated, the Petitioner's NPDES Permit has not historically required sampling for TSS and oil at outfall 001a. However, NPDES Permit #11L0002763 has been reissued and will become effective on October 30, 1985. In this reissued NPDES Permit, the miscellaneous waste discharge has been segregated from the condenser cooling water discharge of Outfall 001 and sampling for total suspended solids and oil will now be mandated. (Rec 2).

During the time period that the Miscellaneous Wastewater Treatment Facility is being repaired, the Petitioner intends to reroute wastewaters from the station fire sump to the Unit 1 oil/water separator. This oil/water separator, which is currently designed as outfall 001e in the reissued NPDES Permit, is ordinarily used for treating parking lot runoff and, as presently configured, does not permit effluent sampling. However, Commonwealth Edison believes that this oil/water separator can reduce the oil content of the discharge by as much as 80%. Although a temporary sampling device might possibly be installed during the bypass of the MWWTP, the Petitioner believes that such a sampling device would not yield representative samples of discharges from the Unit 1 oil/water separator because of the location of the discharge pipe in the separator and because of possible back flow from Lake Michigan. (Rec. 3). Apparently, these cracks were first noticed by the Petitioner almost two years ago in their initial stages and have now become severe enough to require immediate repair. (Rec. 3). Commonwealth Edison intends to remove oily sludges from the

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\*ND = no data available

bottom of its equalization basin which have accumulated over a period of time to a depth of between three to five feet. However, no immediate plan to dispose of these sludges has been presented by the Petitioner. (Rec. 3).

The Petitioner believes that there are no other practical alternatives to the treatment plan previously delineated. The flows apparently "cannot be treated in the rad waste system because they are too large and because the oil could foul the filters in that system." (Rec. 3). Commonwealth Edison Company has asserted that the only other alternative to its proposed plan would be to close the entire Zion Generating Station at an estimated cost of about \$1,000,000 per day. (Rec. 3). The Agency agrees with the Petitioner that the proposed method of treatment is the only plan which will give optional treatment during the time the MWWTP is out of service without causing undue economic hardship or environmental problems. (Rec. 3).

Because the flows are mixed with the Unit 1 condenser cooling water discharge (about 1200 MGD) and since oil booms will be used throughout the Petitioner's plant to contain any extraneous oil which may escape, the Agency believes that the environmental impact of the discharge from the Unit 1 oil/water separator will be minimal. Additionally, based on the necessity of the repairs to return the Petitioner's plant to proper operating condition, the minimization of down time, and upon the treatment to be provided in the interim period while maintenance and repair work are being completed, the Agency believes that a provisional variance is appropriate in the instant case.

The Agency has therefore concluded that compliance with applicable standards would impose an arbitrary or unreasonable hardship upon Commonwealth Edison Company. (Rec. 3-4). Accordingly, the Agency has recommended that the Board grant the Petitioner a provisional variance from 35 Ill. Adm. Code 304.124 as it pertains to total suspended solids and oil, subject to certain specified conditions.

Pursuant to Section 35(b) of the Illinois Environmental Protection Act, the Board hereby grants the provisional variance as recommended.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

Commonwealth Edison Company is hereby granted a provisional variance from 35 Ill Adm. Code 304.124 as it pertains to total suspended solids and oil while necessary repair and maintenance work is being done at the Miscellaneous Wastewater Treatment Facility at its Zion Generating Station, subject to the following conditions:

1. This provisional variance shall commence on October 24, 1985 and shall continue for a period of 30 days, or upon the completion of repairs to the Miscellaneous Wastewater Treatment Facility, whichever occurs first.

2. The Petitioner shall take all steps possible to minimize regenerative wastewater, as outlined in its petition for provisional variance.

3. The Petitioner shall install oil booms, or similar oil collection devices, throughout the station to minimize oil from entering the wastewater system.

4. The process flows shall be routed through the Unit 1 Oil/Water Separator for treatment prior to discharge.

5. The Petitioner shall sample the contents of the fire sump and at a point as representative as possible of the discharge of the oil/water separator. Grab samples shall be collected daily and analyzed for total suspended solids and oil.

6. The Petitioner's effluent shall be limited, during the term of this provisional variance, as follows:

	<u>Daily Maximum</u>	<u>30 Day Average</u>
Total Suspended Solids	100 mg/l	30.0 mg/l

7. The Petitioner's effluent shall meet all other effluent limitations as outlined in its NPDES Permit #IL0002763.

8. The Petitioner's request for relief from oil effluent limitations is hereby dismissed as moot.

9. The Petitioner shall dispose of its sludges from the Miscellaneous Wastewater Treatment Facility in accordance with the appropriate State regulations and shall obtain the proper permits for its disposal.

10. The Petitioner shall notify, by telephone, the Agency's Maywood Regional Office when repairs to the Miscellaneous Wastewater Treatment Facility are completed. This notification shall be made within 24 hours of the completion of the repairs and written notification of the completion shall be sent to:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Compliance Assurance Section  
2200 Churchill Road  
Springfield, Illinois 62706  
Attention: Mr. Roger Cruse

11. Within 10 days of the date of the Board's Order, the Petitioner shall execute a Certification of Acceptance and Agreement which shall be sent to Mr. James Frost of the Agency at the following address:

Mr. James Frost  
Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Compliance Assurance Section  
2200 Churchill Road  
Springfield, Illinois 62706

This certification shall have the following form:

I, (We), \_\_\_\_\_, having read the Order of the Illinois Pollution Control Board in PCB 86-162, dated October 24, 1985, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
Petitioner

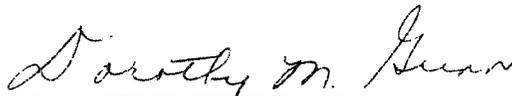
\_\_\_\_\_  
By: Authorized Agent

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 24<sup>th</sup> day of October, 1985 by vote of 7-0.

  
\_\_\_\_\_  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board