

PHILADELPHIA ELECTRIC COMPANY

2850633480

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

June 19, 1985

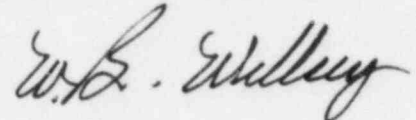
Director  
Office of Nuclear Reactor Regulation  
US Nuclear Regulatory Commission  
Washington, DC 20555

RE: NPDES Permit Amendment No. 1  
for Limerick Generating Station

Dear Sir:

In accordance with "Appendix B of the Limerick Generating Station Operating License No. NPF-27, Environmental Protection Plan", attached is the subject NPDES permit amendment for Limerick Generating Station which covers the use of three cooling water additives (polyacrylate, sodium silicate, and tolyltriazale). The attached permit amendment is in effect from June 4, 1985 to September 19, 1989.

Sincerely yours,



W. B. Willsey  
Director  
Environmental Affairs

Attachment  
DWM:nas

cc: Administrator,  
Region I  
Office of Inspection and Enforcement  
US Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

8506240087 850619  
PDR ADOCK 05000352  
P PDR

cool  
1/1



REFSEQNO 2850626960

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES

1875 New Hope Street  
Norristown, PA 19401  
215 270-1975



June 4, 1985

2850633480

Philadelphia Electric Company  
2301 Market Street  
Philadelphia, PA 19101

Attention: W. B. Willsey  
Director Environmental Affairs

Re: Ind. Waste NPDES Permit No. PA0051926  
Amendment No. 1  
Philadelphia Electric  
(Limerick Generating Station)  
Limerick Township  
Montgomery County

Gentlemen:

Enclosed please find amended pages (page 1, 2, 14a and 14c) of the NPDES Permit No. PA0051926 issued on September 19, 1984 that covers discharge of effluent to the Schuylkill River from Outfall 001. The permit is being amended to incorporate effluent limits on three cooling water additives, Polyacrylate, Sodium Silicate and Tolyltriazole and also delete the temperature requirement on the Perkiomen Creek intake supply.

A master copy of the amended page of the DMR form relative to the Outfall 001 is also enclosed. This master should be reproduced for your use relative to the required DMR which must be submitted on a monthly basis to EPA and our Department.

Please study the permit amendment carefully and direct any questions to the Permit Section of the Office.

Very truly yours,

*Joseph A. Feola*

JOSEPH A. FEOLA  
Regional Water Quality Manager

JAF:DB:bjo

Enclosures: Amended Page 1, 2, 14a and 14c  
Amended DMR for Outfall 001

cc: Limerick Township  
Permits and Compliance  
EPA  
DRBC  
RE 30 4NPDES.26

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT

2850633480

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

INDUSTRIAL PERMIT NO. PA 0051926

Amendment #1

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Philadelphia Electric Company  
is authorized to discharge from a facility located at

Limerick Township  
Montgomery County

to receiving waters named

Schuylkill River and Possum Hollow Run  
in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B, and C hereof.

This permit and the authorization to discharge shall expire at midnight,  
September 19, 1989

The authority granted by this permit is subject to the following further qualifications:

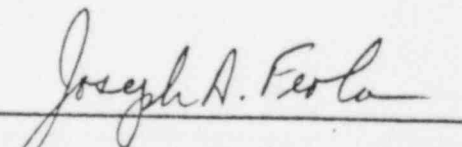
1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
3. Application for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the Department at least 180 days prior to the above expiration date (unless permission has been granted by the Department for submission at a later date), using the appropriate NPDES permit application form. In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of the application for permit renewal.
4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

AMENDED  
PERMIT ISSUED

DATE 6-4-85

PE.2

BY



TITLE

Joseph A. Feola  
Regional Water Quality Manager

2850633480

REF ID: A2850626960

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 001; LOCATED AT LATITUDE 40°13'10", LONGITUDE 75°35'20", WHICH RECEIVES WASTE FROM: combined discharges (STP, holding pond, treated radwaste, Unit 1 cooling tower blowdown and spray pond blowdown).
- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
FLOW (MGD)	N/A	N/A	N/A	N/A	N/A	1/Week	Measured	N/A
FREE AVAILABLE CHLORINE **	N/A	N/A	N/A	0.2	0.5	1/Week***	Grab	N/A
PRIORITY POLLUTANTS	N/A	N/A	See Other Requirements E			Not Monitored		N/A
TEMPERATURE****	N/A	N/A	N/A	N/A	N/A	1/Week	i-s	N/A
pH	Within Limits of 6 to 9 Standard Units at all times					1/Week	Grab	N/A
POLYACRYLATE	Monitor Only					1/Month	Grab	
SODIUM SILICATE				44.0		1/Month	Grab	N/A
TOLYLTRIAZOLE				5.2		1/Month	Grab	N/A

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 001 prior to underwater diffuser.

\*Unless otherwise indicated, these are gross discharge limitations.

\*\*See Other Requirement D.

\*\*\*Samples to be analyzed for Free Available Chlorine shall be collected on a day when, in accordance with the chlorine feed schedule, the permittee believes chlorine will be present in the cooling tower blowdown. At least two grab samples shall be analyzed by the amperometric titration method during the two hour chlorine release period. The average of all such analyses made over a single period of chlorine release shall comply with the above Free Available Chlorine Maximum Daily limitation.

\*\*\*\*See Other Requirement A.

## PART C

REFSEQNO 2850626960

## OTHER REQUIREMENTS

- A. The following requirements apply with respect to the thermal impact of the discharges upon the Schuylkill River:

The discharge shall not cause a rise of stream temperature when the ambient stream temperature is 87°F or above; nor cause more than a 5°F rise above ambient temperature until stream temperature reaches 87°F; nor cause a change of stream temperature by more than 2°F during any one-hour period.

The permittee shall monitor the temperature of water at the intake on the Schuylkill River at least once per week and shall report the results on the monthly DMR for Outfall 001.

- B. There shall be no discharge of polychlorinated biphenyl compounds (PCB's) from any outfall at any time.
- C. Effective disinfection to control disease producing organisms shall be the production of an effluent which will contain a concentration not greater than 200/100 ml of fecal coliform organisms as a geometric average value, nor greater than 1000/100 ml of these organisms in more than 10% of the samples tested.
- D. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any generating unit for more than two hours in any one day and not more than one generating unit in any plant may discharge free available or total residual chlorine at any one time. This requirement shall take effect exactly 15 months after the station begins commercial operation, unless the permittee can demonstrate to the Department that the generating units in a particular location cannot operate at or below this level of chlorination. During the interim the permittee shall limit chlorination of water used in the cooling tower to two hours per day and shall comply with the FAC limits for Discharge 001. FAC and TRC shall be analyzed using the respective amperometric titration method.
- E. The discharge of any of the 126 priority pollutants in detectable amounts is prohibited from cooling tower discharges if the pollutants originate from cooling tower maintenance chemicals. No chemical addition (except chlorine, polyacrylate, sodium silicate and tolyltriazole) or treatment for control of corrosion, algae, slime, etc. shall be made to the cooling water which discharge is covered by this permit unless such chemical addition or treatment is approved beforehand by the Department.
- F. Effluent limitations, monitoring requirements, and other standard and special conditions which relate to the discharge(s) of pollutants authorized by this permit and which are contained in Water Quality Management Permit(s)

No. 4671202 issued on 7/16/76

No. 4672437 issued on 7/16/76

PA0024414 issued on 12/11/81

are superseded by the terms and conditions of this permit, unless specifically noted otherwise herein.



## PART C

REFSEQNO 2850626960

## OTHER REQUIREMENTS (Continued)

- J. If, in the opinion of the Department, these works are not so operated or if by reason of change in the character of wastes or increased load upon the works, or changed use or condition of the receiving body of water, or otherwise, the said effluent ceases to be satisfactory or the sewerage facilities shall have created public nuisance, then upon notice by the Department the right herein granted to discharge such effluent shall cease and become null and void unless within the time specified by the Department, the permittee shall adopt such remedial measures as will produce an effluent which, in the opinion of the Department, will be satisfactory for discharge into the said receiving body of water.
- K. No storm water from pavements, area ways, roofs, foundation drains or other sources shall be admitted to the sanitary sewers associated with the herein approved discharge.
- L. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.
- M. Debris collected on the intake trash racks shall not be returned to the waterway.
- N. The permittee shall conduct a study to determine the influent and effluent levels of the following parameters: total chromium, total copper, total lead, total nickel, total zinc, total dissolved solids and temperature. Such study shall occur during the period from July 1 through December 31 of the first year during which the entire period is available following the station's commencement of commercial operation. As a minimum, monitoring for the above parameters shall be done once per week by grab sample of Discharge 001, Schuylkill River intake water and Perkiomen Creek intake water (except temperature). Within 90 days of completion of the study, the permittee shall submit a report to the Department and EPA which presents all monitoring data collected. The Department reserves the right to require further studies or monitoring or to modify or revoke and reissue this permit to establish effluent limitations and monitoring requirements for the parameters included in the study.
- O. This permit does not approve any cooling tower blowdown discharge from Unit 2 cooling tower. If the permittee wishes to place this cooling tower into operation during the life of this permit, the permittee must first obtain an amendment to this permit. An application for such amendment shall be submitted to the Department at least 180 days prior to commencement of a cooling tower blowdown discharge from Unit 2 cooling tower. The discharge of construction related wastewater, in compliance with the effluent limits for Monitoring Point 401, is approved by this permit.

2850633480

REFSEQNO 2850626960

Additional Instructions for Utilizing  
The  
National Pollutant Discharge Elimination System  
DISCHARGE MONITORING REPORT

The attached originals of the NPDES Discharge Monitoring Report have been provided to you as a master. The permit establishes specific effluent monitoring and reporting requirements and these values are repeated on the original Discharge Monitoring Report provided for you. The "N/A" placed in the permit condition block of the Discharge Monitoring Report indicates one of two things: (1) that the parameter is monitored but no limitations are imposed, and the pertinent value must be reported; or (2) that the parameter is limited elsewhere on the Discharge Monitoring Report, and the value should be reported if it is available.

Your reports are to be submitted by utilizing copies of the attached forms. Do not write on or send the attached originals, but rather: (1) make copies of them, (2) fill out the copies as appropriate, (3) make the necessary copies of the completed (filled out) form, and (4) submit these copies to the appropriate EPA and State Offices as provided in the permit.

PERMITTEE NAME/ADDRESS (Include  
Facility Name/Location if different)

2850633480

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

OMB No. 2040-0004  
Expires 3-29-84

NAME Philadelphia Electric Company  
ADDRESS 2301 Market Street  
Philadelphia, PA

PA 0051926  
PERMIT NUMBER

001  
DISCHARGE NUMBER

Amendment No. 1

FACILITY Limerick Generating Station  
LOCATION Limerick Township, Montgomery County

MONITORING PERIOD									
YEAR			MO	DAY	YEAR			MO	DAY
FROM					TO				
	(20-21)	(22-23)	(24-25)			(26-27)	(28-29)	(30-31)	

2850626960

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE MONTHLY (46-53)	MAXIMUM DAILY (54-61)	UNITS (54-61)	INST MINIMUM (38-45)	AVERAGE MONTHLY (46-53)	INST MAXIMUM (54-61)	UNITS (54-61)			
FLOW	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	N/A	N/A	MGD						1/WK	MEAS
EFFLUENT TEMPERATURE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					N/A	N/A	°F		1/WK	I-S
pH	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT			****	6.0	N/A	9.0	STD.		1/WK	GRAB
SCHUYLKILL RIVER INTAKE TEMPERATURE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					N/A	N/A	°F		1/WK	I-S
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE	DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)



PERMITTEE NAME/ADDRESS (Include  
Facility Name/Location if different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

OMB No. 2040-0001  
Expires 2-29-84

NAME Philadelphia Electric Company  
ADDRESS 2301 Market Street  
Philadelphia, PA 19106

PA 0051926  
PERMIT NUMBER

001  
DISCHARGE NUMBER

Amendment No. 1

FACILITY Limerick Generating Station  
LOCATION Limerick Township, Montgomery County

MONITORING PERIOD  
FROM YEAR MO DAY TO YEAR MO DAY  
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

2850626860

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	MAXIMUM DATE	MAXIMUM	UNITS			
TOLYTRIAZOLE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					5.2		MG/L		1/MO	GRA
SODIUM SILICATE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					44		MG/L		1/MO	GRA
POLYACRYLATE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					N/A		MG/L		1/MO	GRA
FREE AVAILABLE CHLORINE	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.2	0.5	MG/L		1/WK	GRA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

TYPED OR PRINTED

AREA  
CODE

NUMBER

YEAR

MO

DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)