

METROPOLITAN EDISON COMPANY

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

GQL 0006
January 14, 1977

Director of Nuclear Reactor Regulations
Attn: Mr. R. W. Reid, Chief
Operating Reactors Branch 4
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Sir:

Three Mile Island Nuclear Station (TMI-1)
Operating License #DPR-50
Docket #50-289

It is not apparent from the record that we have at all times been in compliance with the Environmental Technical Specifications for our Three Mile Island Nuclear Station (TMI-1) Section 5.6.2.4 (Item #2, concerning changes made in, or proposed for, Permits and/or Licenses).

"Changes or additions to permits and certificates required by Federal, State, Local and Regional authorities for the protection of the environment will be reported. When the required changes are submitted to the concerned agency for approval, they will also be submitted to USNRC for information. The submittal will include an evaluation of the environmental impact of the change."

In order to bring the record up to date, enclosed please find copies of those permits and/or licenses which are required for the protection of the environment (in their current form) along with the proposed revisions thereof which are pending.

1. Commonwealth of Pennsylvania
Department of Environmental Resources
Water Quality Management Permit #2275419
2. Commonwealth of Pennsylvania
Department of Environmental Resources
Water Quality Management Permit #2272202
(No proposed revisions pending)

1564 298

7911010 770

- 3. United States Environmental Protection Agency
Permit # PA. 009920
(Forwarding letter and proposed revision attached)

- 4. Commonwealth of Pennsylvania
Department of Environmental Resources
Water Quality Management Permit #2270204
(Forwarding letter and proposed revision attached)

- 5. Commonwealth of Pennsylvania
Department of Environmental Resources
Most recent application for Industrial
Waste Permit
(Forwarding letter attached)

As the proposed changes are intended to meet current environmental regulations as established by the appropriate regulating authority, it is our estimation that the pollution levels for that section of the Susquehanna River will be reduced through the implementation of said proposed changes.

Although in the past we may not have always been in strict compliance with the Environmental Technical Specifications for our Three Mile Island Nuclear Station (TMI-1), Section 5.6.2.4 (Item #2), in the future, we shall make every effort to meet and comply with it.

We trust this submittal to be satisfactory; however, should you have any questions, please contact me.

Sincerely,

[Signature]
R. C. Arnold
Vice President

RCA:RAL:rk

Enclosure: Water Quality Management Permits Nos. 2272202,
2270204, 2275419
EPA Permit #PA 0009920

1564 299



Enclosure #2
Met-Ed Co.
GQL 0531 dated 4-19-77 FEB 16 1977
Page 1 of 7

RECEIVED

GENERATION:

DEPARTMENT OF ENVIRONMENTAL RESOURCES

1002 Health & Welfare Building
Harrisburg, Pennsylvania 17120

February 15, 1977

Copies to

3cc's - L³

1cc - ACA

1cc - Chrono

1cc - Sub. File
corporate
files given to
CWS. 2-16-77.

Industrial Wastes
Londonderry Township
Dauphin County

R. C. Arnold, Vice-President
Metropolitan Edison Company
2800 Pottsville Pike
Reading, Pennsylvania 19603

SUBJECT: Industrial Wastes Permit No. 2276209

Gentlemen:

Subject permit is enclosed.

Please study the permit carefully and direct any questions to the
Facilities Section of this office at (717-787-9665).

Very truly yours,

James V. Donato

James V. Donato, P. E.
Engineer - In - Charge
Harrisburg Regional Office

JVD:jvl

Enclosures Permit
Standard Conditions

cc: L. David Garman, P. E.
Gilbert Associates, Inc.

1564 300

POOR ORIGINAL

WATER QUALITY MANAGEMENT PERMIT

NO. 2276209

A. PERMITTEE (Name and Address) Metropolitan Edison Company 2800 Pottsville Pike Reading, Pennsylvania 19603	B. PROJECT LOCATION Municipality <u>Londonderry Township</u> County <u>Dauphin</u>
C. TYPE OF FACILITY OR ESTABLISHMENT Electric Generation	D. NAME OF MINE, OPERATION OR AREA SERVED Three Mile Island Nuclear Station

E. THIS PERMIT APPROVES 1. Plans For Construction of a. <input type="checkbox"/> PUMP STATIONS, SEWERS AND APPURTENANCES b. <input type="checkbox"/> SEWAGE TREATMENT FACILITIES c. <input type="checkbox"/> MINE DRAINAGE TREATMENT FACILITIES d. <input checked="" type="checkbox"/> INDUSTRIAL WASTE TREATMENT FACILITIES e. <input type="checkbox"/> OUTFALL & HEADWALL f. <input type="checkbox"/> STREAM CROSSING	2. The Discharge of: a. <input checked="" type="checkbox"/> TREATED <input type="checkbox"/> UNTREATED b. <input checked="" type="checkbox"/> INDUSTRIAL WASTE <input type="checkbox"/> MINE DRAINAGE <input type="checkbox"/> SEWAGE 5. Nature of Discharge or Impoundment: <input checked="" type="checkbox"/> DISCHARGE TO SURFACE WATER <input type="checkbox"/> DISCHARGE TO GROUND WATER <input type="checkbox"/> IMPOUNDMENT <u>Susquehanna River</u> <small>(Name of Stream to which discharged or drainage area on which ground water discharge takes place or impoundment is located).</small>	3. The Operation of: <input type="checkbox"/> MINE MAXIMUM AREA TO BE DEEP MINED _____ <input type="checkbox"/> DAM 4. An Erosion and Sedimentation Control Plan <input checked="" type="checkbox"/> PROJECT AREA IS <u>2</u> ACRES.
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F. You are hereby authorized to construct, operate or discharge, as indicated above, provided that you comply with the following :

- All representations regarding operations, construction, maintenance and closing procedures as well as all other matters set forth in your application and its supporting documents (Application No. 2276209 dated December 23, 1976), and amendments dated January 26, 1977. Such application, its supporting documents and amendments are hereby made a part of this permit.
- Conditions numbered All of the Industrial Standard Conditions dated October 1, 1971 which conditions are attached hereto and are made a part of this permit. 1564 301
- Special condition(s) designated A, B, C and D which are attached hereto and are made a part of this permit.

G. The Authority granted by this permit is subject to the following further qualifications:

- If there is a conflict between the application or its supporting documents and amendments and the standard or special conditions, the standard or special conditions shall apply.
- Failure to comply with the Rules and Regulations of the Department or the terms or conditions of this permit shall void the authority given to the permittee by the issuance of the permit.
- This permit is issued pursuant to the Clean Streams Law, The Act of June 22, 1937, P.L. 1987 as amended and/or the Water Obstruction Act of June 25, 1913, P.L. 555 as amended. Issuance of this permit shall not relieve the permittee of any responsibility under any other law.

PERMIT ISSUED
 DATE February 15, 1977
 BY James V. Donato
 TITLE James V. Donato, P. E.
 Engineer - In - Charge

This permit is issued subject to all Department of Environmental Resources Rules and Regulations now in force and the following Special Conditions:

- A. The quality of the effluent discharged from the herein approved treatment works shall be limited at all times as follows:

pH-	not less than 6.0 nor greater than 9.0
Acidity -	shall not be acid
Suspended Solids-	30 mg/l as 7-day average 60 mg/l maximum at anytime
Oil and Grease-	15 mg/l as 7-day average 30 mg/l maximum at anytime

In addition to the above requirements, the permittee shall provide satisfactory disposal of sludge; and shall reduce the quantities of oil, grease, acids, alkalis, toxic, taste and odor producing substances inimical to the public interest to levels that will not pollute the receiving stream.

- B. Within six months after the herein approved waste treatment works are constructed and placed in operation, the permittee shall submit to the Department evidence of the efficiency and adequacy of such works in treating the discharges from this establishment.
- C. The attention of the permittee is directed to the necessity of technical control and experimentation in the operation of the proposed waste treatment works to insure the most effective chemical dosages and proper operation cycles necessary for satisfactory performance at all times.
- D. Inasmuch as the sufficiency of the proposed treatment will depend in a considerable measure upon the degree to which the production (quantity) of the raw waste is reduced, and whether the treatment works are adjusted to secure maximum efficiency, the permittee shall place the matter of the said reduction of the raw waste pollution load and the operation of the waste treatment works under the direct supervision of a competent sanitary engineer or other qualified person satisfactory to the Department.

1564 302

October 1, 1971

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Enclosure #2
Met-Ed Co.
GQL 0531 dated 4-19-77
Page 4 of 7

STANDARD CONDITIONS RELATING TO INDUSTRIAL WASTES

For use in: Water Quality Management Permits

1971

POOR ORIGINAL

General

1. The plans for which this permit is issued are approved subject to the condition that the waste treatment plant constructed under said plans will produce an effluent satisfactory to the Department. By this approval, neither the Department nor the Commonwealth of Pennsylvania assumes any responsibility for the feasibility of the plans or the operation of the plant to be constructed thereunder.
2. All relevant and non-superseded conditions of any prior water quality management permits, decrees, or orders issued to the herein permittee or his predecessor shall be continued in full force and effect and together with the provisions of this permit shall apply to his successors, lessees, heirs and assigns.
3. The responsibility for the carrying out of the conditions of this permit shall rest upon the owner, lessee, assignee, or other party in responsible managerial charge of the operation producing the wastewaters and of the waste treatment works herein approved, such responsibility passing with each succession in said control. Approval of a discharge or facilities under a permit shall not be effective as to a new owner until a transfer has been executed and filed on forms provided by the Department and the transfer is approved by the Department.
4. The permittee shall secure any necessary permission from the proper federal authority for any outfall or industrial waste treatment structure which discharges into or enters navigable waters and shall obtain approval of any stream crossing, encroachment or change of natural stream conditions coming within the jurisdiction of the Department.
5. In order to avoid obsolescence of the plans of waste treatment works, the approval of the plans herein granted, and the authority granted in the permit, if not specifically extended, shall cease and be null and void two years from the date of this permit unless the works covered by said plans shall have been completed and placed in operation on or before that date.

1564 303

6. Approval of plans refers to functional design and not structural stability, which is assumed to be sound and in accordance with good structural design. Failure of the works herein approved because of faulty structural design or poor construction will render the permit void.
7. The Department may at a subsequent time modify, suspend or revoke this permit whenever the waters affected by the presently authorized waste discharge have become so improved in character through natural or artificial processes of conservation or reclamation as to render inimical or harmful the effluent from the works herein approved, or whenever the Department increases treatment requirements for wastes generally.

Therefore, the permittee is hereby notified that when the Department shall have determined that the public interest requires the further treatment of such of the permittee's industrial wastes as are discharged to the waters of the Commonwealth, then upon notice by the Department and within the time specified, the permittee shall submit to the Department for its approval, plans and a report providing for the required degree of treatment, and after approval thereof, shall construct such works in accordance with the requirements of the Department.

8. If at any time the industrial waste treatment works of the permittee, or any part thereof, or the discharge of the effluent therefrom, shall have created a public nuisance, or such discharge is causing or contributing to pollution of the waters of the Commonwealth, the permittee shall forthwith adopt such remedial measures as are acceptable to the Department.
9. Nothing herein contained shall be construed to be an intent on the part of the Department to approve any act made or to be made by the permittee inconsistent with the permittee's lawful powers or with existing laws of the Commonwealth regulating industrial wastes and the practice of professional engineering, nor shall this permit be construed to sanction any act otherwise forbidden by any of the laws of the Commonwealth of Pennsylvania or of the United States.

Construction

10. The works shall be constructed under expert engineering supervision and competent inspection, and in accordance with plans, designs, and other data as herein approved or amended, and with the conditions of this permit.
11. No radical changes shall be made in the works herein approved without approval of the Department. Revisions which do not increase the rate of flow or change the quality of the effluent, the treatment processes or the point of discharge, may be approved by the Regional Sanitary Engineer upon submission of plans. Other revisions must be approved by a permit.

12. The outfall sewer or drain shall be extended to low water mark of the receiving body of water in such a manner as to insure the satisfactory dispersion of its effluent thereinto; insofar as practicable it shall have its outlet submerged; and shall be constructed of cast iron, concrete, or other material approved by the Department; and shall be so protected against the effects of flood water, ice, or other hazards as to reasonably insure its structural stability and freedom from stoppage.
13. When the herein approved industrial waste treatment works is completed and before it is placed in operation, the permittee shall notify the Department so that an inspection of the works may be made by a representative of the Department.

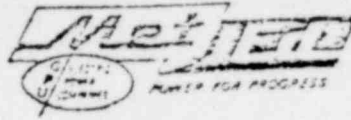
Operation and Maintenance

14. No matter how well designed and carefully constructed a waste treatment works may be, full effectiveness cannot be developed unless it is efficiently operated. In order to secure such efficiency, protect the waters of the Commonwealth, and insure the most effective and economical dosage when chemicals are used, the permittee is required to place the works under the regular charge of a responsible plant official, and its operation under the control of the designer of the works or other qualified person approved by the Department, for at least one year after completion. Moreover, upon written notice from the Department, the permittee shall maintain one or more skilled operators regularly on duty for such daily periods as the Department may direct.
15. The right to discharge the effluent from the herein approved industrial waste treatment works into the waters of the Commonwealth is contingent upon such operation of these works as will at all times produce an effluent of a quality satisfactory to the Department. 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 for such discharge, 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.
16. No untreated or ineffectively treated wastewaters shall at any time be discharged into the waters of the Commonwealth, and especial care shall be used to prevent accidental "spills" or similar unusual discharges of all raw, finished and waste materials.

1564 305

17. No storm water, sewage or other industrial wastes not specifically approved herein, shall be admitted to the works for which this permit is issued, unless with the approval of the Department.
18. The various structures and apparatus of the industrial waste treatment works herein approved shall be maintained in proper condition so that they will individually and collectively perform the functions for which they were designed. In order to insure the efficacy and proper maintenance of the treatment works, the permittee shall make periodic inspections at sufficiently frequent intervals to detect any impairment of the structural stability, adequate capacity, or other requisites of the herein approved works which might impair their effectiveness, and shall take immediate steps to correct any such impairment found to exist.
19. Any screenings, and any settled or floated solids, shall at no time be permitted to accumulate in sedimentation basins to a depth sufficient to interfere with the settling efficiency thereof. Any such material removed shall be handled and disposed of so that a nuisance is not created and so that every reasonable and practical precaution is taken to prevent the said material from reaching the waters of the Commonwealth.
20. The permittee shall keep records of operation and efficiency of the waste treatment works and shall submit to the Department, promptly at the end of each month, such report thereon as may be required by the Department.
21. The discharge of untreated or improperly treated industrial wastes to the waters of the Commonwealth is contrary to the requirements of the Department. If, because of accidental breakdown of the treatment works or plant equipment or for other reason, any such discharge should occur, then the operation of the mill or process producing such discharge shall be discontinued until repairs to the treatment works or other satisfactory measures to prevent water pollution shall have been completed.

1564 306



METROPOLITAN EDISON COMPANY SUBSIDIARY OF GENERAL PUBLIC UTILITIES CORPORATION

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

March 15, 1977
GQL 0315

Mr. Terry Fabian
Regional Water Quality Manager
Pa. Dept. of Environmental Resources
1002 Health and Welfare Building
Harrisburg, Pennsylvania 17120

POOR ORIGINAL

Dear Sir:

Industrial Waste Permits
#2270204 and #2276209

In response to Mr. R. A. Shertzer's letter of December 30, concerning the use of NALCO 41-L and a chromate-phosphate treatment as corrosion inhibitors at Three Mile Island Nuclear Station (TMI), enclosed please find:

1. A listing of the chemical make-up of NALCO 41-L.
2. A revision of our pollution incident prevention plan (PIPP) which addresses the receiving, storage and handling of NALCO 41-L and chromate-phosphates.

Although this PIPP revision details the handling of both NALCO 41-L and chromate-phosphates, we do not anticipate the implementation of a Chromate-Phosphate Treatment until a later date. We hope, however, to begin using NALCO 41-L as a corrosion inhibitor in the secondary services closed cooling system as soon as possible after receiving DER authorization.

Mr. Shertzer is correct in assuming that Chromates and Phosphates which are entrained by the radioactive waste evaporators will be handled in the same manner as are all other wastes from that same source. The ultimate disposal site for sludges from the radwaste system is the federally approved radioactive waste disposal site at Barnwell, South Carolina.

Please be advised that our letter of December 22 was not entirely accurate in that it is possible for the Radioactive Waste Evaporators to be bypassed. However, if a chromate-phosphate treatment is to be used as a corrosion inhibitor, this radwaste treatment system will not be bypassed.

1564 307

Mr. Terry Fabian

-2-

March 15, 1977
GQL 0315

In light of the fact that the above-referenced permits make no mention of NALCO 41-L and chromate-phosphate, we request that said permits be amended to recognize the use of NALCO 41-L as a corrosion inhibitor in the secondary services closed cooling system at TMI. At some future date, we expect to request either a similar amendment to allow the use of a Chromate-Phosphate Treatment as a corrosion inhibitor for the remaining closed cooling systems, or an amendment which will extend the use of NALCO-41L to all closed cooling systems at TMI.

We trust this submittal to be satisfactory, however, should you have any further questions, please contact me.

Sincerely,

~~Signed~~ - R. C. Arnold

L. L. Lawyer
Manager-Generation
Quality Assurance

LLL:RAL:dr

Attachments: 1) Chemical Analysis of NALCO 41-L
2) Revision to PIPP

cc: R. H. Shertzer (PaDER)

POOR ORIGINAL

bcc: B. J. Beck
J. J. Colitz
J. P. O'Hanlon
J. G. Herbein
L. L. Lawyer
G. P. Miller
J. G. Reed
C. W. Smyth

1564 308

File: 02.0016.0003.0050.02

COMMONWEALTH OF PENNSYLVANIA

Enclosure #4
Met-Ed Co. -
GGL 0531 dated 4-19-77
Page 1 of 1



DEPARTMENT OF ENVIRONMENTAL RESOURCES
Room 1002 Health & Welfare Building
Harrisburg, Pennsylvania 17120
(717) 787-9665
April 13, 1977

Industrial Waste Permit No. 2270204
Londonderry Township
Dauphin County

L. L. Lawyer
Manager-Generation
Quality Assurance
Metropolitan Edison Company
P.O. Box 542
Reading, PA 19603

REC-100
APR 14 1977
GENERATION

Copies to
3cc's LG
1cc REA
1cc Approval
Orig File

Dear Mr. Lawyer:

This confirms your letter of March 15, 1977 with documents on the use of NALCO 41-L as a corrosion inhibitor at Three Mile Island. Permit No. 2270204 has been amended to include a copy of your letter and the documents identified in that letter.

Robert Lingle called on April 12, 1977 to inform us that the material is being used. Richard Shertzer will be sending a separate response with comments to your letter. These comments will be related to operations.

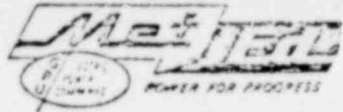
Very truly yours,

James V. Donato

James V. Donato, P.E.
Chief, Facilities Section
Harrisburg Regional Office

JVD:kew

1564 309



METROPOLITAN EDISON COMPANY SUBSIDIARY OF GENERAL PUBLIC UTILITIES CORPORATION

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

March 15, 1977
GQL 0316

Mr. Bruce Smith
Enforcement Division
United States Environmental
Protection Agency
Region III
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

POOR ORIGINAL

Dear Sir:

We are considering the use of NALCO 41-L and a Chromate-Phosphate Treatment as corrosion inhibitors at our Three Mile Island Nuclear Station (TMI). Enclosed please find a copy of the information which we have recently forwarded to the Pennsylvania Department of Environmental Resources for approval.

We request that our NPDES Permit #0009920 be amended to allow the use of NALCO 41-L as a corrosion inhibitor in the secondary services closed cooling system at Three Mile Island Nuclear Station (TMI).

We trust this submittal to be satisfactory, however, should you have any questions, please contact me.

Sincerely,

Signed - R. C. Arnold

L. L. Lawyer
Manager - Generation
Quality Assurance

1564 310

LL:RAL:dr
Attachment: GQL #0315

cc: Mr. W. J. Riley - EPA

cc: B. J. Beck
J. J. Colitz
J. P. O'Hanlon
J. G. Herbein
L. L. Lawyer
G. P. Miller
J. G. Reed
C. W. Smyth