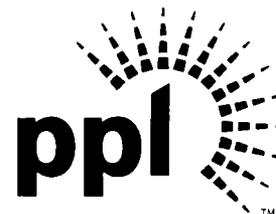


Britt T. McKinney
Sr. Vice President & Chief Nuclear Officer

PPL Susquehanna, LLC
769 Salem Boulevard
Berwick, PA 18603
Tel. 570.542.3149 Fax 570.542.1504
btmckinney@pplweb.com



JUN 14 2007

~~U.S. Nuclear Regulatory Commission~~
Document Control Desk
Mail Stop OP1-17
Washington, DC 20555

**SUSQUEHANNA STEAM ELECTRIC STATION
APPLICATION FOR RENEWED OPERATING LICENSES
NUMBERS NPF-14 AND NPF-22
ENVIRONMENTAL AUDIT DOCUMENT REQUESTS
OTHER REFERENCE INFORMATION
PLA-6221**

**Docket Nos. 50-387
and 50-388**

Reference: 1) Letter from Mr. A. L. Stuyvenberg (USNRC) to Mr. B. T. McKinney (PPL), "Environmental Site Audit Regarding Susquehanna Steam Electric Station, Units 1 and 2 Nuclear Power Plant License Renewal Application (TAC NOS. MD3021 and MD3022)," dated April 18, 2007.

The purpose of this letter is to provide documents requested by the NRC reviewers during the NRC's Environmental Audit conducted at the Susquehanna Steam Electric Station (SSES). The audit was conducted between May 15 and May 17, 2007. NRC reviewers requested PPL provide these documents during the audit de-brief meeting to complete the environmental review of PPL's application for a renewed operating license.

Each document request is identified in the enclosure to this letter (as provided by the NRC Environmental Project Manager at the audit de-brief meeting) along with a written response by PPL. In some cases, NRC requests were edited for clarity, as shown in bracketed text. The requested documents are provided as attachments to this letter and are informational in nature to assist the NRC review. Please note that one of the documents is in response to NRC Question #25, identified during the audit de-brief meeting.

There are no new regulatory commitments contained herein as a result of these responses.

If you have any questions, please contact Mr. Duane L Filchner at (610) 774-7819.

Richard P. Fogolin
for B. T. McKinney

A120

URR

Enclosure: PPL Responses to Environmental Audit Document Requests

- Attachments:
- Attachment 1 Pipeline Map
 - Attachment 2 Storage Tank Registration/Permit Certificate
 - Attachment 3 Letter from Pa DEP to PPL regarding Solid Waste Disposal Site No. 3, I.D. No. 101363. December 2, 2003.
 - Attachment 4 South Carolina Radioactive Waste Transport Permit
 - Attachment 5 Tennessee Radioactive Waste License-for-Delivery
 - Attachment 6 Letter to McCormick – September 13, 2006. From: USACE Baltimore, RE: Dredging in Susquehanna River, With Enclosures.
 - Attachment 7 Photos and Diagram of Cooling Towers
 - Attachment 8 Section 401 - Clean Water Act Certification, March 25, 2007.
 - Attachment 9 Letter to USFWS from Ichthyological Associates, Inc. November 7, 1983.
 - Attachment 10 Ecology III, Inc. September 1991. Letter from Ecology III Inc. to USFWS regarding its 1991 monitoring program for impinged juvenile American shad at the Susquehanna River water intake.
 - Attachment 11 Letter from Susquehanna River Anadromous Fish Restoration Committee to PPL. September 11, 1992.
 - Attachment 12 Letter from Susquehanna River Anadromous Fish Restoration Committee to PPL. August 24, 1993.
 - Attachment 13 Letter from Susquehanna River Anadromous Fish Restoration Committee to PPL. September 27, 1994.
 - Attachment 14 PJM Planners Recommend New Pennsylvania to New Jersey Transmission Line
 - Attachment 15 PPL Susquehanna Riverlands Hunting Guide
 - Attachment 16 Wetland Map On-Site
 - Attachment 17 Air Quality Permit (Entire Permit)
 - Attachment 18 Site Aerial View (Prior to Construction)
 - Attachment 19 Range Expansion of the Asiatic Clam, Corbicula Fluminea, in the North Branch of the Susquehanna River

Copy: NRC Region I

Ms. Y. K. Diaz-Sanabria, NRC Project Manager, License Renewal, Safety
Mr. A. L. Stuyvenberg, NRC Project Manager, License Renewal, Environmental
Mr. A. J. Blamey, NRC Sr. Resident Inspector
Mr. R. V. Guzman, NRC Sr. Project Manager
Mr. R. Janati, DEP/BRP

**Enclosure to PLA-6221
PPL Responses to Environmental Audit
Document Requests**

NRC Document Request 8:

VI Alternatives K, Pipeline Map

PPL Response:

PPL Attachment 1 contains the requested document.

NRC Document Request 19:

VIII, Nonradiological Waste I, Storage Tank Registration/Permit Certificate

PPL Response:

PPL Attachment 2 contains the requested document.

NRC Document Request 24:

Letter from PaDEP to PPL regarding Solid Waste Disposal Site No. 3, I.D. No. 101363.
December 2, 2003.

PPL Response:

PPL Attachment 3 contains the requested document.

NRC Document Request 35:

VII, Radiological Protection, L (Book 3 of 3), South Carolina Radioactive Waste
Transport Permit.

PPL Response:

PPL Attachment 4 contains the requested document.

NRC Document Request 36:

VII, Radiological Protection, L (Book 3 of 3), Tennessee Radioactive Waste-License-for-Delivery.

PPL Response:

PPL Attachment 5 contains the requested document.

NRC Document Request 51:

II, Hydrology & Permits, A, Letter to McCormick – September 13, 2006. From: USACE
Baltimore, RE: Dredging in Susquehanna River, with enclosures.

PPL Response:

PPL Attachment 6 contains the requested document.

NRC Document Request 62:

Photos and Diagram of Cooling Towers

PPL Response:

PPL Attachment 7 contains the requested document.

NRC Document Request 63:

[Provide] "Section 401 - Clean Water Act Certification." [July 16, 1982.]

PPL Response:

PPL Attachment 8 contains the requested document.

NRC Document Request 64:

Letter to USFWS from Ichthyological Associates, Inc., November 7, 1983.

PPL Response:

PPL Attachment 9 contains the requested document.

NRC Document Request 82:

XIV Terrestrial Ecology, G, Ecology III, Inc. September 1991. Letter from Ecology III Inc. to USFWS regarding its 1991 monitoring program for impinged juvenile American shad at the Susquehanna River water intake.

PPL Response:

PPL Attachment 10 contains the requested document.

NRC Document Request 83:

XIV Terrestrial Ecology, G, Letter from Susquehanna River Anadromous Fish Restoration Committee to PPL. September 11, 1992.

PPL Response:

PPL Attachment 11 contains the requested document.

NRC Document Request 84:

XIV Terrestrial Ecology, G, Letter from Susquehanna River Anadromous Fish Restoration Committee to PPL. August 24, 1993.

PPL Response:

PPL Attachment 12 contains the requested document.

NRC Document Request 85:

XIV, Terrestrial Ecology, G, Letter from Susquehanna River Anadromous Fish Restoration Committee to PPL. September 27, 1994.

PPL Response:

PPL Attachment 13 contains the requested document.

NRC Document Request 89:

VI, Alternatives L, [Provide the web article] "PJM Planners Recommend New Pennsylvania to New Jersey Transmission Line".

PPL Response:

PPL Attachment 14 contains the requested document.

NRC Document Request 91:

XIV, Terrestrial Ecology, M, PPL Susquehanna Riverlands Hunting Guide

PPL Response:

PPL Attachment 15 contains the requested document.

NRC Document Request 97:

Wetland Map On-Site

PPL Response:

PPL Attachment 16 contains the requested document.

NRC Document Request 103:

III, Air, C, Air Quality Permit (Entire Permit)

PPL Response:

PPL Attachment 17 contains the requested document.

NRC Document Request 121:

V, Cultural Resources, G. Photo: Pre, Post, During Construction.
(NOTE: Would like hardcopy and CD).

PPL Response:

Per telecon between Messrs. Stuyvenberg (NRC) and Filchner (PPL) on June 12, 2007, these photos are no longer required for the environmental review.

NRC Document Request 122:

V, Cultural Resources, H. Copies of old maps of the site prior to construction.

PPL Response:

PPL Attachment 18 contains a site aerial view prior to construction.

NRC Document Request 127:

V, Cultural Resources, N. Provide response regarding the description of the land use history of the site prior to the power plant.

PPL Response:

Based on the recollection of an individual familiar with the site prior to the power plant, the Golomb brothers (Charles and Theodore) operated a truck farm, growing typical vegetables such as beans, potatoes, sweet corn, tomatoes, cabbage, etc. They operated a produce stand alongside Route 11 and sold some of their vegetables from there. Most of the produce was sent to Thomas & Thomas Co. in Wilkes-Barre, PA, for resale to other areas. The individual did not recall any dairy, beef, or poultry animals being raised on the farm. Other adjacent farms like the Woznock's and Naunczek's, portions of which comprise SSES property today, did basically the same.

NRC Question 25:
(PPL Tracking #52)

[Provide] the following publication:

Range Expansion of the Asiatic Clam, *Corbicula Fluminea*, in the North Branch of the Susquehanna River by B. P. Mangan. *Journal of PA Academy of Science* 76(1):40-42 (2002).

PPL Response:

PPL Attachment 19 contains the requested document.

Attachment 1 to PLA-6221
Pipeline Map

Attachment 1 □

Figure from National Pipeline Mapping System □
redacted by NRC staff □

Official Use Only - Security Related Information

Attachment 2 to PLA-6221
Storage Tank Registration/Permit Certificate

VERIFY PRESENCE OF WATERMARKED

HOLD TO LIGHT TO VIEW

Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Waste Management

STORAGE TANK REGISTRATION/PERMIT CERTIFICATE
EXPIRATION: APR-04-2008

TANK ID	SEQ#	CAPACITY	SUBST	PERMIT TYPE	PERMIT STATUS	INSPECTION TYPE	LAST INSP DATE	NEXT INSP DUE BY
671358	008A	5,000	DIESEL	PBR	Approved	*****	*****	*****
671364	011A	7,000	HZSUB	PBR	Approved	IN-SERVICE	03/28/2009	*****
671366	012A	7,000	HZSUB	PBR	Approved	IN-SERVICE	07/26/2001	07/26/2011
671381	020A	6,500	HZSUB	PBR	Approved	IN-SERVICE	07/26/2001	07/26/2011
671384	023A	3,600	HZSUB	PBR	Approved	*****	*****	*****
671385	024A	3,600	HZSUB	PBR	Approved	*****	*****	*****
671386	025A	1,500	HZSUB	PBR	Approved	*****	*****	*****
671387	026A	500	HZSUB	PBR	Approved	*****	*****	*****
671373	016	19,000	NMO	PBR	Approved	OPERATIONS	11/21/2006	11/21/2011

Client ID: 187377 Site ID: 250359
 Owner Type: LLC Facility Kind: UTSAN
 Id: 40-10748 Facility Id: 40-10748
 JERROLD L MCCORMECK SUSQUEHANNA STEAM ELEC STA
 PPL SUSQUEHANNA LLC 769 SALEM BLVD
 769 SALEM BLVD BERWICK PA 18603-0467

NUCSA3
 WARNING: THIS DOCUMENT IS PRINTED ON SECURITY WATERMARK PAPER AND CONTAINS SECURITY FIBERS. DO NOT ACCEPT WITHOUT VERIFYING THE PRESENCE OF THE WATERMARK.

VERIFY PRESENCE OF WATERMARKED

HOLD TO LIGHT TO VIEW

Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Waste Management

STORAGE TANK REGISTRATION/PERMIT CERTIFICATE
EXPIRATION: APR-04-2008

TANK ID	SEQ#	CAPACITY	SUBST	PERMIT TYPE	PERMIT STATUS	INSPECTION TYPE	LAST INSP DATE	NEXT INSP DUE BY
671375	017	19,000	NMO	PBR	Approved	OPERATIONS	11/21/2006	11/21/2011
671377	018	10,000	GAS	PBR	Approved	OPERATIONS	11/21/2006	11/21/2011
671379	019	10,000	DIESEL	PBR	Approved	OPERATIONS	11/21/2006	11/21/2011

Client ID: 187377 Site ID: 250359
 Owner Type: LLC Facility Kind: UTSAN
 Id: 40-10748 Facility Id: 40-10748
 JERROLD L MCCORMECK SUSQUEHANNA STEAM ELEC STA
 PPL SUSQUEHANNA LLC 769 SALEM BLVD
 769 SALEM BLVD BERWICK PA 18603-0467

NUCSA3
 WARNING: THIS DOCUMENT IS PRINTED ON SECURITY WATERMARK PAPER AND CONTAINS SECURITY FIBERS. DO NOT ACCEPT WITHOUT VERIFYING THE PRESENCE OF THE WATERMARK.

**Attachment 3 to PLA-6221
Letter from PaDEP to PPL Regarding
Solid Waste Disposal Site No. 3
I.D. No. 101363
December 2, 2003**

Attachment 3 to PLA-6221
Letter from PaDEP to PPL Regarding
Solid Waste Disposal Site No. 3
I.D. No. 101363
December 2, 2003



Pennsylvania Department of Environmental Protection

2 Public Square
Wilkes-Barre, PA 18711-0790
December 2, 2003

Northeast Regional Office

570-826-2511
Fax 570-826-5448

PPL Susquehanna, LLC
769 Salem Boulevard
Berwick, PA 18603

Attention: Mr. Richard L. Anderson
Vice President Nuclear Operations

Re: PPL Susquehanna, LLC
Solid Waste Disposal Site No. 3
I.D. # 101363
Salem Township, Luzerne County

Dear Mr. Anderson:

The Department has reviewed PPL's October 13, 2003 submission, regarding final closure of its Solid Waste Disposal Site No. 3 located in Salem Township, Luzerne County.

This letter constitutes the Department's Final Closure Certification for the aforementioned disposal site. The Department will proceed to release PPL's \$68,000.00 Financial Assurance Bond.

If you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Robert C. Wallace
Chief, Engineering & Facilities Section
Waste Management Program

570-211742
CR-1174897

Attachment 4 to PLA-6221
South Carolina Radioactive Waste Transport
Permit

BOARD:
Elizabeth M. Hagood
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

BOARD:
Henry C. Scott
Paul C. Aughton III
Glenn A. McCall
Coleman E. Buckhouse, MD

November 13, 2006

Michael C. Micca, Health Physicist
PPL Susquehanna, LLC
Susquehanna Steam Electric Station
769 Salem Blvd.
Berwick, PA 18603

Dear Mr. Micca:

Enclosed is your S.C. Radioactive Waste Transport Permit No. 0162-37-07-X which is effective until December 31, 2007.

All prior notification forms filed with the Department and shipping documents accompanying radioactive waste shipments into or within South Carolina should have your permit number indicated on them.

Also as provided by the Administrative Appeals Act, you have an opportunity to request a hearing to contest this action. The procedure for this is described in Attachment 2.

Should you have any questions concerning your permit or the transportation of radioactive waste into the State of South Carolina, please do not hesitate to contact me at (803) 896-4247.

Very truly yours,

Arlene K. Wilkes, Program Coordinator
Division of Waste Management
Bureau of Land & Waste Management

Enclosure

Notice of Appeal Procedure

The following procedures are in effect beginning July 1, 2006, pursuant to 2006 Act No. 387:

1. This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.
2. An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3323.

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201

3. The request for final review should include the following:
 - a. the grounds on which the Department's decision is challenged and the specific changes sought in the decision
 - b. a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
 - c. a copy of the Department's decision or action under review
4. In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.
5. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.
6. The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.
7. If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.

**Attachment 5 to PLA-6221
Tennessee Radioactive
Waste License-for-Delivery**



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
L&C ANNEX - THIRD FLOOR
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243-1532

November 14, 2006

PPL Susquehanna LLC
769 Salem Boulevard
Berwick, Pennsylvania 18603

Attention: Michael C. Micca, Health Physicist

RE: Radioactive Waste License-for-Delivery

Mr. Micca:

Attached to this letter is your Tennessee Radioactive Waste-License-for-Delivery number T-PA001-L07 issued with an expiration date of December 31, 2007.

If we may be of further assistance, please feel free to contact me at (615) 532-0388.

Sincerely,

A handwritten signature in cursive script that reads "Seble Aynachew".

Seble Aynachew
Health Physicist
Division of Radiological Health

Attachments:

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
L&C ANNEX - THIRD FLOOR
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243-1532

LICENSEE:

PPL Susquehanna LLC
769 Salem Boulevard
Berwick, Pennsylvania 18603

Delivery License Number: T-PA001-L07

Date of Expiration: December 31, 2007

Pursuant to Tennessee Department of Environment and Conservation Regulations, and in reliance on statements and representations made by the licensee in application dated November 2, 2006, with attachment, a license is hereby issued authorizing the licensee to ship radioactive material described below to a licensed disposal/processing facility within Tennessee. This license is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect.

The license authorizes shipment of any radioactive material (except special nuclear material sufficient to form a critical mass) in any chemical and/or physical form and in a quantity not to exceed the possession limit of the licensed recipient.

The licensee is authorized to ship radioactive material from the facility located at:

Susquehanna Steam Electric Station (Units 1 & 2)
Berwick, Pennsylvania

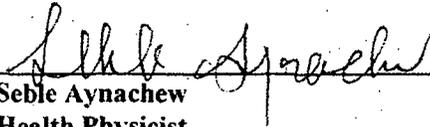
into or within Tennessee to a disposal/processing facility that is licensed by Tennessee to receive such material.

The licensee shall comply with all applicable provisions of the regulations and conditions of the recipient facility's license.

Effective date of this license: January 1, 2007

For the Commissioner
Tennessee Department of
Environment and Conservation

Date: November 14, 2006

By: 
Seble Aynachew
Health Physicist
Division of Radiological Health

Attachment 6 to PLA-6221

Letter to McCormick – September 13, 2006.

**From: USACE Baltimore, RE: Dredging in
Susquehanna River, With Enclosures**



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

SEP 13 2006

Operations Division

Jerrold McCormick
PPL Susquehanna, LLC
769 Salem Blvd
Berwick, Pennsylvania 18603

Dear Mr. McCormick :

This is in reference to your application, CENAB-OP-RPA (PP&L/SUSQUEHANNA STEAM ELECTRIC STATION)06-10107-P12, dated June 19, 2006 and received by the Corps on June 26, 2006, for Department of the Army (DA) authorization to maintenance dredge approximately 200 cubic yards of silt and sediment from approximately 5,000 square feet in front of the Susquehanna Steam Electric Station's River intake structure. In addition, 20 to 30 cubic yards shall be removed from inside the discharge diffuser pipe on the river bottom. Dredging will not extend outside the limits of previously permitted maintenance dredging areas. The project is located approximately 0.25 miles east of U.S. Route 11, along the western bank of the Susquehanna River, in Salem Township, Luzerne County, Pennsylvania. In addition, all dredged material shall be removed to an upland disposal site. This maintenance dredging will be conducted on an as needed basis to minimize the accumulation of silt and sediment throughout the station's cooling system.

This waterway (and wetlands) has (have) been determined to be within our regulatory jurisdiction and the proposed activity requires DA authorization pursuant to Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.

The proposed work, if accomplished in accordance with the enclosed terms and conditions and the information included in your application, is authorized under the Pennsylvania State Programmatic General Permit-3 (PASPGP-3), as published in the Corps Special Public Notice 06-35 issued on June 12, 2006. This authorization may be subject to modification, suspension, or revocation if any of the information contained in the application, including the plan(s), is later found to be in error.

The enclosed list of conditions must be followed for purposes of the PASPGP-3. The enclosed self-certification form must be completed and returned to this office.

This verification is valid for the length of the Pennsylvania Department of Environmental Protection (PADEP) permit, not to exceed three years, or until the PASPGP-3 is modified, reissued, or revoked. You must remain informed of changes to the PASPGP-3. We will issue a public notice announcing the changes when they occur.

Activities authorized under the PASPGP-3 that have commenced construction or are under contract to commence construction, will remain authorized provided the activity is completed within 12 months of the date of the PASPGP-3's expiration, modification, or revocation; or until the expiration date of the project specific verification, whichever is less.

Be advised that this verification authorizes the aforementioned work as a single and complete (one time only) activity. If additional work is to be performed, you must notify this office. Subsequent work in this area may require a separate letter of authorization from this office.

This verification does not obviate the need for obtaining other Federal, State, or local authorizations.

This authorization has been sent to the Pennsylvania Department of Environmental Protection (PADEP) Northeast Regional Office and the Luzerne County Conservation District Office. Subsequent correspondence from the PADEP or the County Conservation District may reiterate the contents of this letter.

If you have any questions concerning this matter, please call Mr. Michael Dombroskie from this office at (814)235-0571.

Sincerely,

Michael Dombroskie

for Irwin Garskof
Chief, Pennsylvania Section

Enclosures
cc: PA DEP - Northeast
Luzerne County Conservation District

PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT - 3

(PASPGP-3)

July 1, 2006

Please note: the full text of the PASPGP-3 may be viewed on the Baltimore District web-site at <http://www.nab.usace.army.mil/Regulatory/Permit/types.htm> or by calling the Corps at 410-962-5673.

Applicant: PPL Susquehanna, LLC
State Authorization(s): _____

Corps District:

Philadelphia
U.S. Army Corps of Engineers,
Philadelphia District
Regulatory Branch
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390

Baltimore
U.S. Army Corps of Engineers,
Baltimore District
Regulatory Branch
P.O. Box 1715
Baltimore, MD 21203

Pittsburgh
U.S. Army Corps of Engineers,
Pittsburgh District
Regulatory Branch
Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186

It has been determined that your proposed project, which includes the discharge of dredged and/or fill material and/or the placement of structures into waters of the United States, including wetlands, qualifies for Federal authorization under the provisions of Section 404 of the Clean Water Act and /or Section 10 of the River and Harbor Act of 1899, under the terms and conditions of the PASPGP-3.

All activities authorized under PASPGP-3 must comply with all conditions of the authorization, including General, Procedural, and Special Conditions. Failure to comply with all the conditions of the authorization, including project special conditions, will constitute a permit violation and may be subject to criminal, civil, or administrative penalties, and /or restoration.

The authorized activity must be performed in compliance with the following General Conditions to be authorized under PASPGP-3:

General Conditions:

1. PADEP Permit Conditions: The permittee shall comply with all terms and conditions set forth in the PADEP authorization for use of this permit, including all conditions of Section 401 Water Quality Certification, and any subsequent amendment or modification to such authorization. The permittee shall conduct all work and activities in strict compliance with all approved maps, plans, profiles, and specifications used by PADEP and/or the Corps as the basis for its authorization or subsequent modification of authorization.

2. Aquatic Life Movements: No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be appropriately depressed to maintain aquatic life movement and low flow conditions.

3. Threatened and Endangered Species: If an activity is authorized under the PASPGP-3, and a Federally listed threatened or endangered species, or proposed species or critical habitat, is subsequently found to be present, all work must cease, and the Corps and USFWS (or NMFS) must be notified. The PASPGP-3 authorization is suspended and will not be re-issued until consultation pursuant to Section 7 of the ESA is concluded and adverse effects to Federally listed threatened, endangered and proposed species and critical habitat are avoided.

Furthermore, persons have an independent responsibility under Section 9 of ESA to not engage in any activity that could result in the "take" of a Federally listed species.

4. Spawning Areas: The permittee shall comply with all time-of-year restrictions as set forth by the PFBC or other designated agency. Discharges or structures in spawning or nursery areas shall not occur during spawning seasons, unless written approval is obtained by the PFBC or other designated agency. In addition, work in areas used for other time sensitive life span activities of fish and wildlife (such as hibernation or migration) may necessitate the use of seasonal restrictions for avoidance of adverse impacts to vulnerable species. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of the year.

5. Waterfowl Breeding and Wintering Areas: Activities including discharges of dredged or fill material or the placement of structures in breeding and wintering areas of migratory waterfowl must be avoided to the maximum extent practicable.

6. Shellfish Production: No discharge of dredged or fill material and/or the placement of structures may occur in areas of concentrated shellfish production, unless the discharge is directly related to an authorized shellfish harvesting activity.

7. Adverse Effects From Impoundments: If the activity, including the discharge of dredged or fill material or the placement of a structure, creates an impoundment of water, the adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow, including impacts to wetlands, shall be minimized to the maximum extent practicable.

8. Obstruction of High Flows: To the maximum extent practicable, the activity must be designed to maintain pre-construction downstream flow conditions (i.e., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters), and the structure or discharge of dredged or fill material must withstand expected high flows. The Activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to pre-construction conditions, and must not increase water flows from the project site, relocate water, or redirect water flow beyond pre-construction conditions. In addition, the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows.

9. Erosion and Siltation Controls: During construction, appropriate erosion and siltation controls must be used and maintained in effective operating condition in accordance with State regulations. All exposed soil and other fill material must be permanently stabilized.

10. Suitable Material: No activity, including discharges of dredged or fill material or the placement of structures, may consist of unsuitable material (i.e., asphalt, trash, debris, car bodies, etc.). No material discharged shall contain toxic pollutants in amounts that would violate the effluent limitation standards of § 307 of the CWA.

11. Temporary Fill: Temporary fill in waters and wetlands authorized by the PASPGP-3 (i.e., access roads and cofferdams) shall be properly constructed and stabilized during use to prevent erosion and accretion. Temporary fill in wetlands shall be placed on geotextile fabric laid on existing wetland grade. Whenever possible, rubber or wooden mats should be used for equipment access through wetlands to the project area. Temporary fills shall be removed, in their entirety, to an approved upland site, and suitably contained to prevent erosion and transport to a waterway or wetland. Temporary fill areas shall be restored to their preconstruction contours, elevations, and hydrology and revegetated with comparable native species.

12. Equipment Working in Wetlands: Measures must be taken to minimize soil disturbance when heavy equipment is used in and adjacent to wetland areas. These measures include, but are not limited to, avoiding the use of such equipment, use of timber mats or geotextile fabric, and the use of low pressure tire vehicles.

13. Installation and Maintenance: Any structure or fill authorized shall be properly installed and maintained to ensure public safety.

14. The Following Conditions Apply to Activities for the Maintenance of Existing Flood Control Projects that are authorized Pursuant to PADEP GP-11:

- a. Dredging and channel cleaning are authorized only within the established limits of the project and only within previously constructed channels. Dredging and channel cleaning shall be limited solely to restoring channel width and depth to design configurations as clearly described in the baseline maintenance plan.
- b. Dredging must be accomplished using bucket-type equipment when working within the channel, unless siphon-type equipment is necessary in conjunction with a separate de-watering structure and a clean return-water procedure is used. In no instance shall sediment be bulldozed or graded within the channel.
- c. A baseline maintenance plan shall be available on-site or at the project sponsor's office. The baseline maintenance plan consists of as-built project plans provided by PADEP or the Corps. The maintenance plan shall include the name and address of the project sponsor; the name and address of the contractor; a copy of the latest inspection report from PADEP or the Corps; a suitable work plan detailing the length and width (in plan view and cross section) of the intended maintenance work; and current photographs of the work area.

15. Permit Expiration: The project-specific PASPGP-3 authorization is valid for the same period as the project-specific PADEP authorization, not to exceed 3 years from the date of authorization, unless modified or extended or until the PASPGP-3 expires, is suspended, or revoked, whichever date occurs sooner.

PASPGP-3 authorization for activities receiving PADEP General Permits shall not exceed 3 years or until the PASPGP-3 expires, is suspended, or revoked, whichever date occurs sooner.

Activities authorized under the PASPGP-3 that have commenced construction or are under contract to commence construction will remain authorized provided the activity is completed within 12 months of the date of the PASPGP-3's expiration, modification, or revocation; or until the expiration date of the project specific verification, whichever is sooner.

16. One-Time Use: A project-specific PASPGP-3 authorization is valid to construct the project, or perform the activity, one time only, except for maintenance activities associated with the authorized activity, if allowed as part of the authorized activity.

17. Water Supply Intakes: No activity, including discharges of dredged or fill material and/or the placement of structures, may occur in the proximity of a public water supply intake except where the activity or discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

18. Cultural Resources: For all activities authorized under a PASPGP-3, upon the discovery of the presence of previously unknown Historic Properties (historic or archaeological), all work must cease and the permittee must notify the SHPO and the Corps of Engineers. The PASPGP-3 authorization is suspended until it is determined, through the Section 106 consultation process, whether the activity will have an affect on the Historic Property. The suspended authorization under PASPGP-3 may be reactivated or modified, through special conditions if necessary, after an affects determination on the Historic Property is made. The PASPGP-3 authorization may be revoked for the specific activity if an adverse affect on the Historic Property can not be avoided or mitigated.

19. Tribal Rights: No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

20. Corps Civil Works Projects: Navigation Projects. The PASPGP-3 does not authorize interference with any Corps navigation project. The permittee understands and agrees that, if future operations by the United States require removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall

cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration.

Other Corps Civil Works Projects (i.e., Flood Control, Dams, and Reservoirs). The PASPGP-3 does not authorize interference with any proposed or existing Federal project.

21. Navigation: No activity authorized under PASPGP-3 may cause more than a minimal adverse affect on navigation. No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein. In addition, activities that require temporary causeways that prohibit continued navigational use of a waterway (i.e., temporary causeways extending greater than $\frac{1}{4}$ the width across the waterway) shall be removed in their entirety upon completion of their use; and shall be clearly marked for purposes of public safety. Nothing in the PASPGP-3 shall in any way restrict the Corps of Engineers from exercising the legal authority to protect the federal interest in navigation and in the navigation servitude of the United States.

22. Inspections: The permittee shall allow a District Engineer or his authorized representative(s) to make periodic inspections at any time deemed necessary in order to ensure that the work is being performed in accordance with all the terms and conditions of the PASPGP-3. The District Engineer may also require post-construction engineering drawings (as-built plans) for completed work.

23. Compliance Certification: A compliance certification form, regarding the PASPGP-3 authorized work and required mitigation, will be forwarded to each permittee with the PASPGP-3 authorization. Every permittee, who receives a written PASPGP-3 authorization, shall submit the signed compliance certification form upon completion of the authorized work and required mitigation. The completed form shall be returned to the appropriate Corps District and include:

- a. A statement that the authorized work was or was not done in accordance with the PASPGP-3 authorization, including any general and/or special conditions. If the work was not done in accordance with the PASPGP-3 authorization, the permittee shall describe the specifics of the deviation from the authorized activity.
- b. A statement that any required mitigation was or was not done in accordance with the permit conditions and approved plans. If the mitigation was not performed in accordance with the permit conditions and approved plans, the permittee shall describe the specifics of the deviation from the permit conditions and plans related to the required mitigation.
- c. Photographs with written descriptions, showing completed authorized work and mitigation, as required by the terms of the compliance certification form.
- d. The signature of the permittee, certifying the completion (or not) of the authorized work and mitigation.

24. Permit Modifications: Any proposed modification of the authorized project that results in a change in the authorized impact to, or use of waters of the United States, including jurisdictional wetlands, must be approved by PADEP. Corps approval is also required if the project had been previously reviewed by the Corps or the proposed modification causes the project impacts to exceed 1.0 acre of waters of the United States, including jurisdictional wetlands, or 250 linear feet of streams, rivers, or other jurisdictional waterbodies including open water areas. Project modifications that cause total project impacts to exceed 1.0 acre of waters of the United States, including jurisdictional wetlands, are not eligible for PASPGP-3 and will be forwarded to the Corps for processing through alternate permit procedures.

25. Recorded Conservation Instruments: As per Part III. A. Activity 22 and Part III. B. Activity 4, proposed conservation instruments may be submitted by the applicant as part of the permit application package. When such proposed conservation instruments are submitted by the applicant, verification of the recorded deed restriction, conservation easement, or deed restricted open space area shall be forwarded to the appropriate Corps District and appropriate PADEP offices, prior to the initiation of any permitted work.

U.S. Army Corps of Engineers District Offices

Pittsburgh District

<http://www.lrp.usace.army.mil>

Federal Building

1000 Liberty Avenue

Regulatory Branch

Pittsburgh, PA 15222-4186

412-395-7152

Baltimore District

<http://www.nab.usace.army.mil/Regulatory/>

P.O. Box 1715

Regulatory Branch, PA Section

Baltimore, MD 21203-1715

410-962-4522 or 814-235-0570

Philadelphia District

<http://www.nap.usace.army.mil>

Wanamaker Building

100 Penn Square East

Regulatory Branch

Philadelphia, PA 19107-3390

215-656-6728

26. Property Rights: This PASPGP-3 does not convey any property rights, either in real estate or material, or any exclusive privileges; nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

By Authority of the Secretary of the Army:

Robert J. Davis
Colonel, Corps of Engineers
District Engineer, Baltimore

Robert J. Ruch
Lieutenant Colonel, Corps of Engineers
District Commander, Philadelphia

Stephen L. Hill
Colonel, Corps of Engineers
District Engineer, Pittsburgh

PASPGP-3 PERMIT COMPLIANCE, SELF-CERTIFICATION FORM (4-6-2006)

PADEP Permit No. _____ Date of Issuance _____
Project Name PP&L/Susquehanna Steam electric Station Applicant Name _____
Corps Permit No. (if available) 06-10107-02 Date of Issuance 13 Sept 2016
Waterway Susquehanna River County LuZerne

Dear Permittee:

In accordance with the compliance certification condition of your PASPGP-3 authorization, you are required to complete and sign this certification form and return it to the appropriate Corps of Engineers District in which the work is located.

- | | | |
|---|--|--|
| <input type="checkbox"/> U.S. Army Corps of Engineers,
Philadelphia District
Regulatory Branch
Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390 | <input checked="" type="checkbox"/> U.S. Army Corps of Engineers,
Baltimore District
Regulatory Branch
P.O. Box 1715
Baltimore, MD 21203 | <input type="checkbox"/> U.S. Army Corps of Engineers,
Pittsburgh District
Regulatory Branch
Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186 |
|---|--|--|

Please note that the permitted activity is subject to compliance inspections by U.S. Army Corps of Engineers representatives. As a condition of this permit, failure to return this notification form, provide the required information below, or to perform the authorized work in compliance with the permit, can result in suspension, modification or revocation of your authorization in accordance with 33 CFR Part 325.7 and/or administrative, civil, and/or criminal penalties, in accordance with 33 CFR part 326.

Please provide the following information:

1. Date authorized work commenced: _____ 2. Date authorized work completed: _____
3. Was all work, including any required mitigation, completed in accordance with your PASPGP-3 authorization?
 YES NO
4. Explain any deviations (use additional sheets if necessary)

5. Was mitigation accomplished through a contribution to the PA Wetlands Replacement Project (FLUND)?
 YES NO (if NO complete Nos. 6 and 7 below).
6. Wetland Mitigation: Required? YES NO Required Completion Date _____
Completed? YES NO Mitigation Monitoring Reports Required? Yes No
7. Attach labeled photographs showing completed work including mitigation area(s) (not required for PADEPGP's/Waivers)

I hereby certify that, except as noted above, that all work, including mitigation, has been completed in accordance with the terms and conditions, including special conditions of the above referenced permit.

Signature of Permittee _____ Date _____

Address: _____

Telephone: _____

Signature of Contractor/Agent _____ Date _____

Address: _____

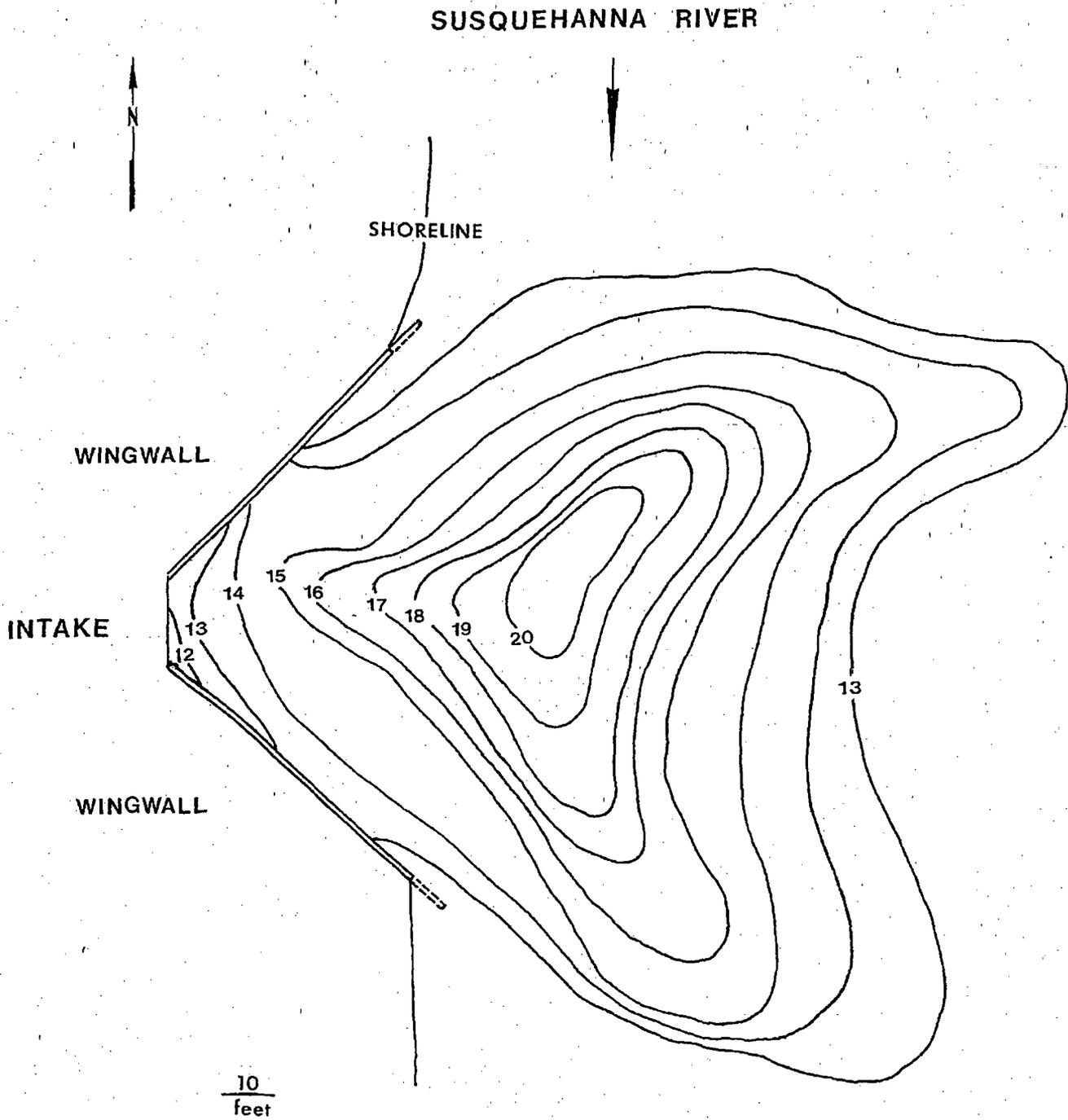
Telephone: _____

- 1 - Susquehanna Steam Electric Station
- 2 - Intake bay
- 3 - Discharge diffuser pipe

SHICKSPINNY 2 1/2 MI
 SHICKSPINNY 1 1/2 MI
BERWICK QUADRANGLE
 PENNSYLVANIA

SHICKSPINNY 2 MI
 7.5-MINUTE SERIES (TOPOGRAPHIC)





River bottom configuration at the Susquehanna SES Intake from a plane-table survey done on 29 August 2005. Contour lines show depth at 1-foot intervals at a river level of 485.8 feet above mean sea level.

SUSQUEHANNA RIVER



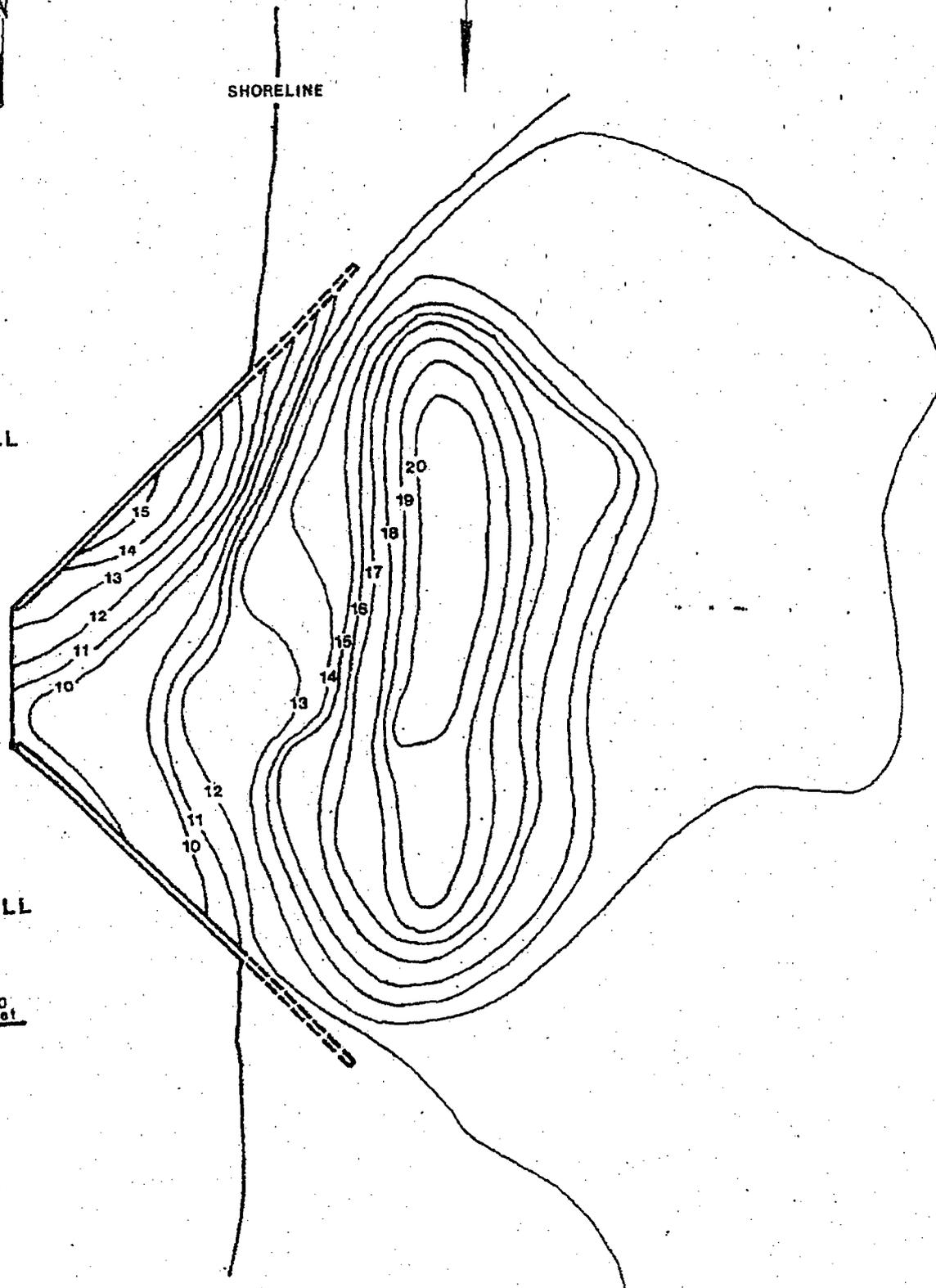
SHORELINE

WINGWALL

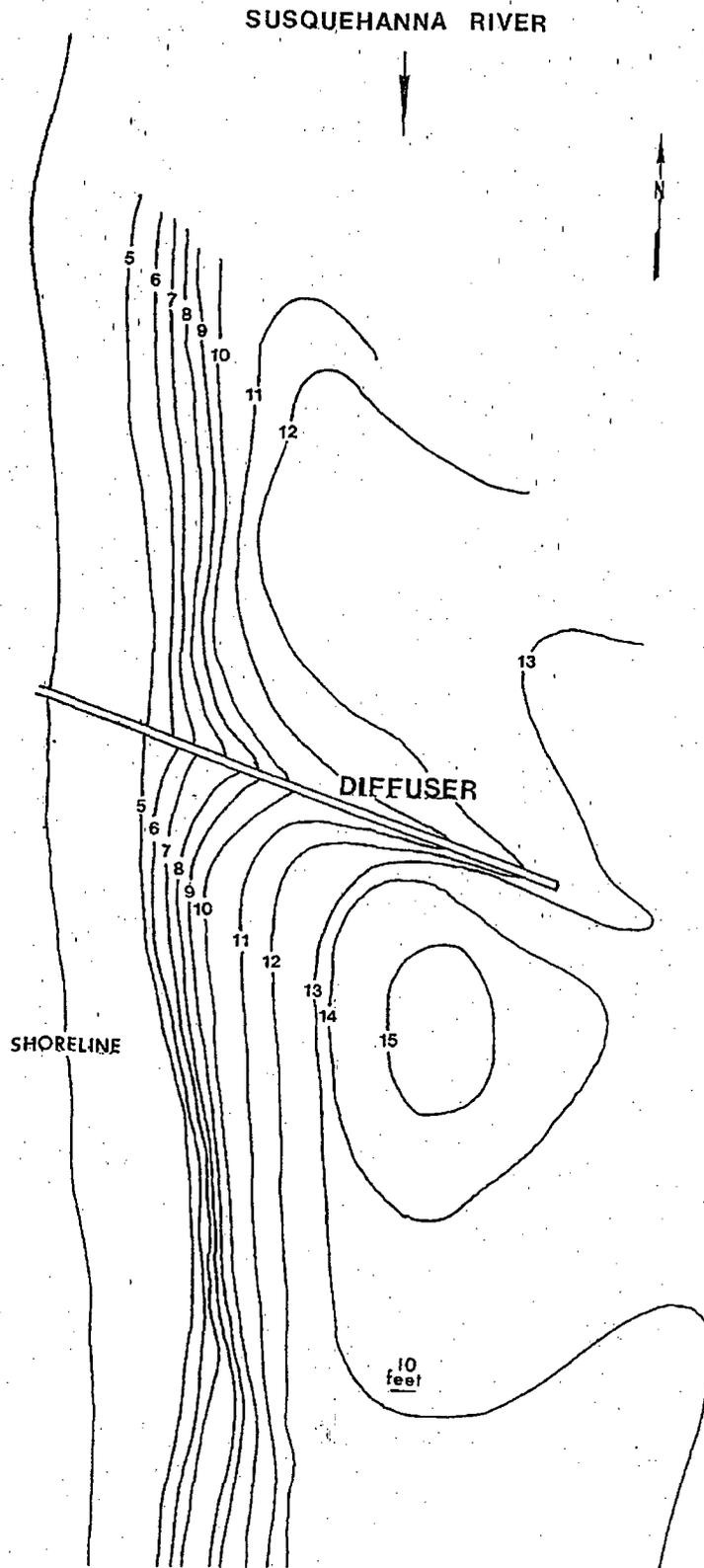
INTAKE

WINGWALL

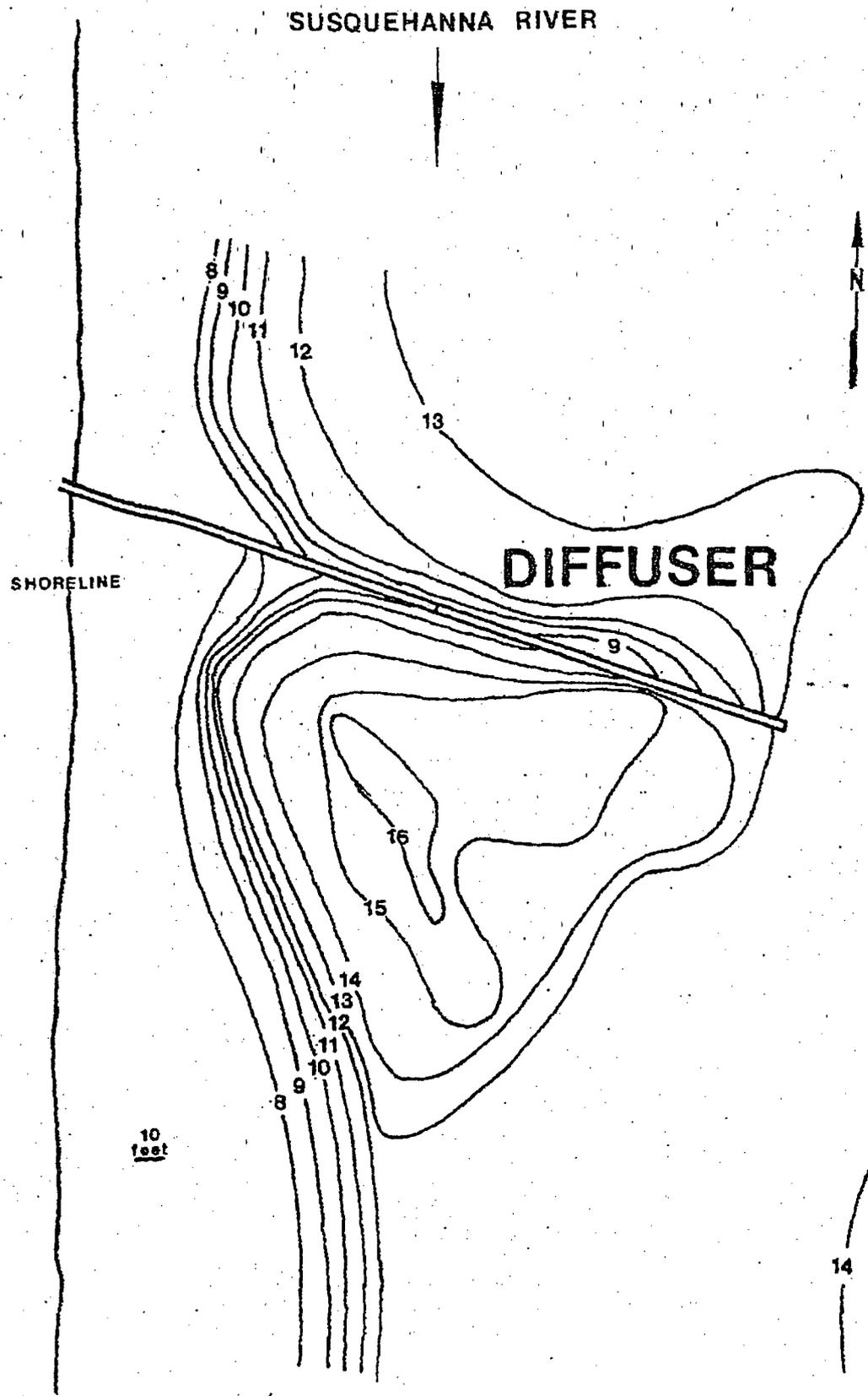
10
feet



River bottom configuration at the Susquehanna SES Intake from a plane-table survey done on 1 August 2002. Contour lines show depth at 1-foot intervals at a river level of 486.4 feet above mean sea level.



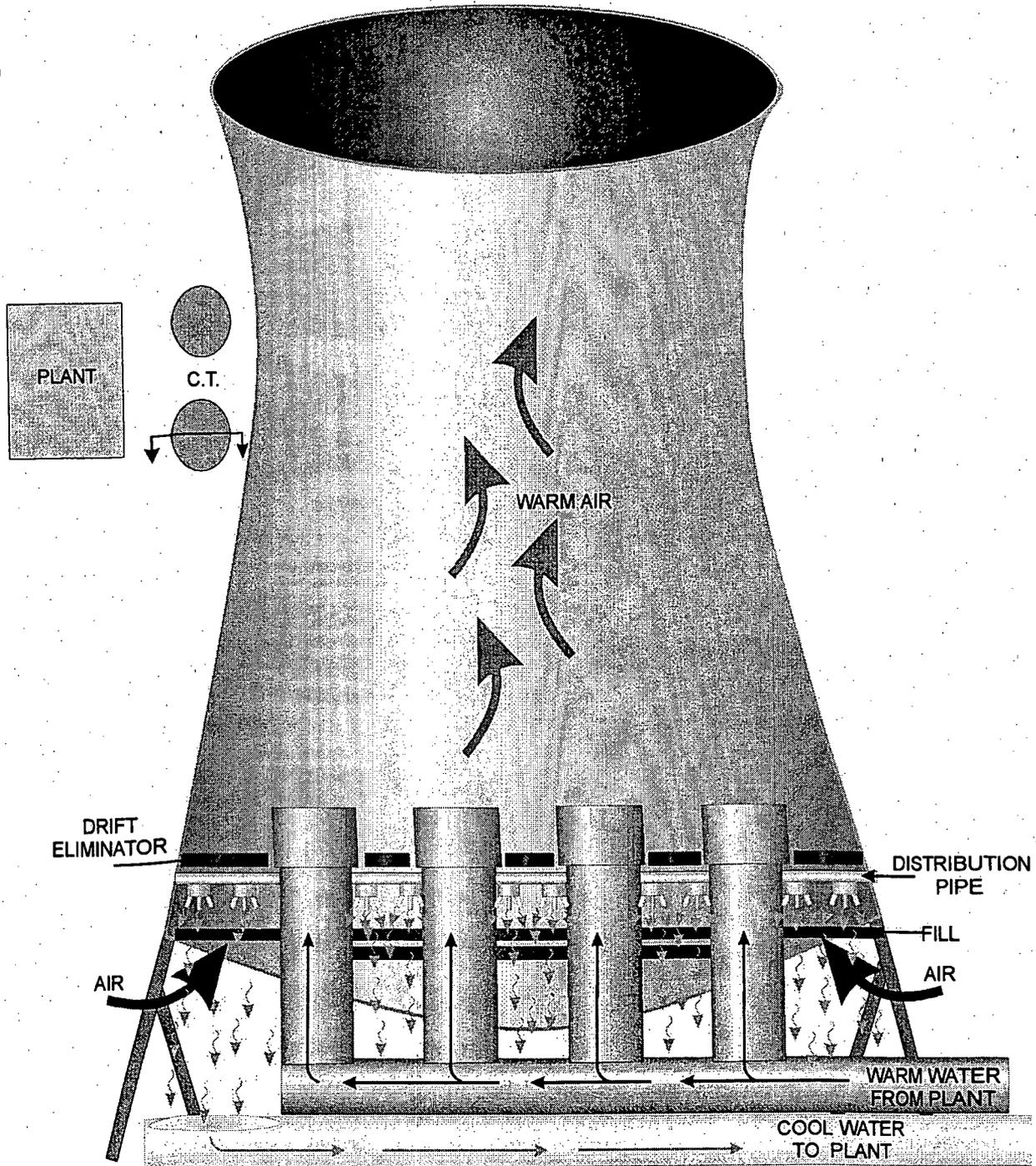
River bottom configuration at the Susquehanna SES Discharge Diffuser Pipe from a plane-table survey done on 29 August 2005. Contour lines show depth at 1-foot intervals at a river level of 485.8 feet above mean sea level.

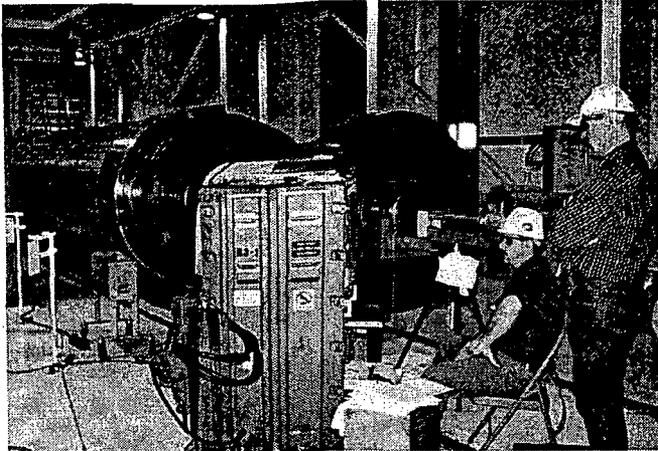


River bottom configuration at the Susquehanna SES Discharge Diffuser Pipe from a plane-table survey done on 1 August 2002. Contour lines show depth at 1-foot intervals at a river level of 486.4 feet above mean sea level.

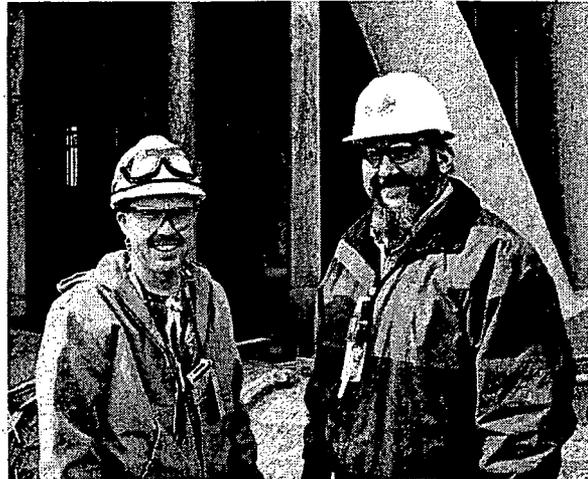
Attachment 7 to PLA-6221
Photos and Diagram of Cooling Towers

Figure 6
North to South Cross Section of Cooling Tower





Jerry Blair and Ken Breuel, General Electric, perform boresonic testing that checks the main generator rotor shaft for signs of degradation.



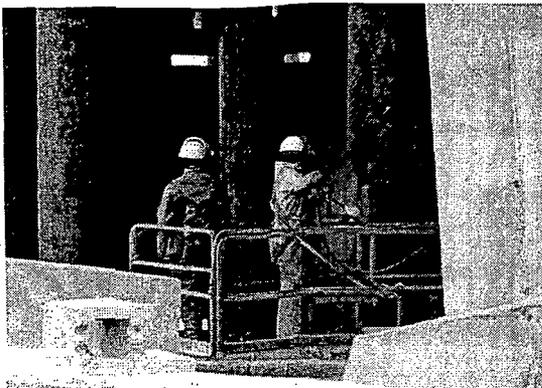
Ron Remsky, offsite emergency planner, discusses safety with the owner of Merrick, which is the company cleaning the cooling towers.



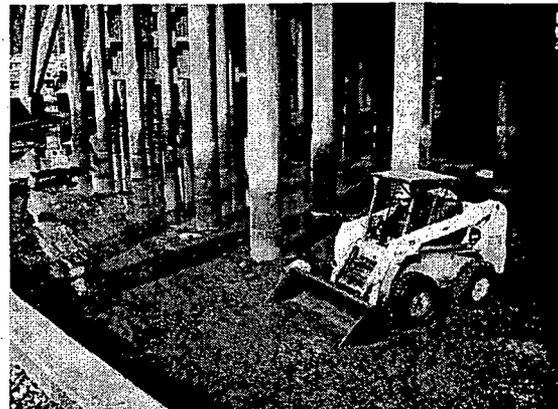
Workers replace fill sheets in the bottom of the cooling towers.



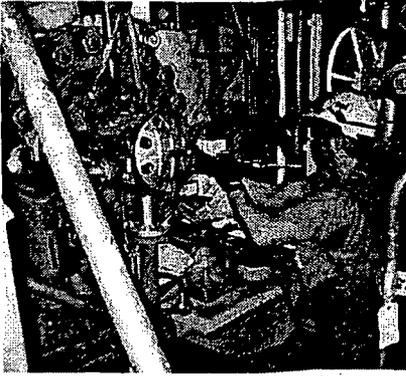
Outage workers cut fill sheets to be placed inside the cooling towers.



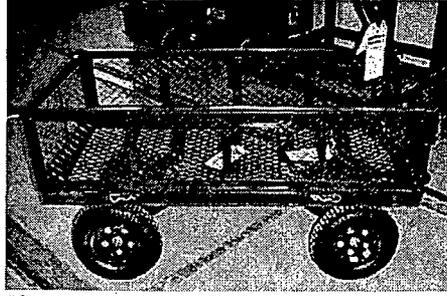
Merrick employees cleaning the cooling towers with high pressure water.



Mud from the river accumulates in the tower basin over the course of a two-year operating cycle. The mud must be removed to maintain heat exchanger performance at optimum levels.



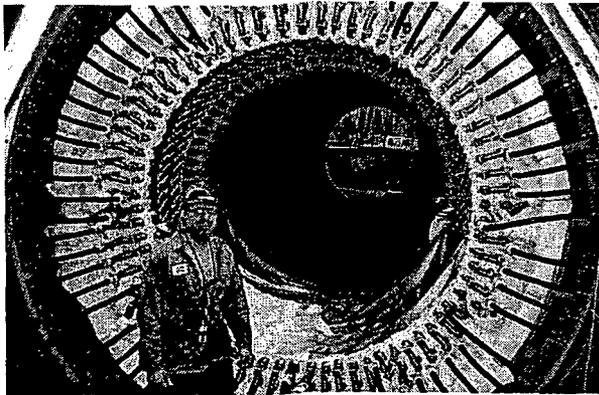
Carmen Welliver, Field Services mechanic, loosens the cover from a feedwater pump to inspect it.



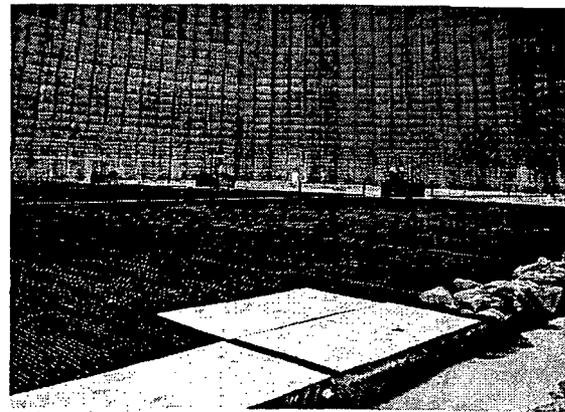
If you see one of these carts on site, do not use it. The wheels snap off easily and pose a safety hazard. If you find one in the plant, take it to the tool room.



Jerry McClintock, steno/clerk for Document and Support Services, works on a recall report for measuring and testing equipment.



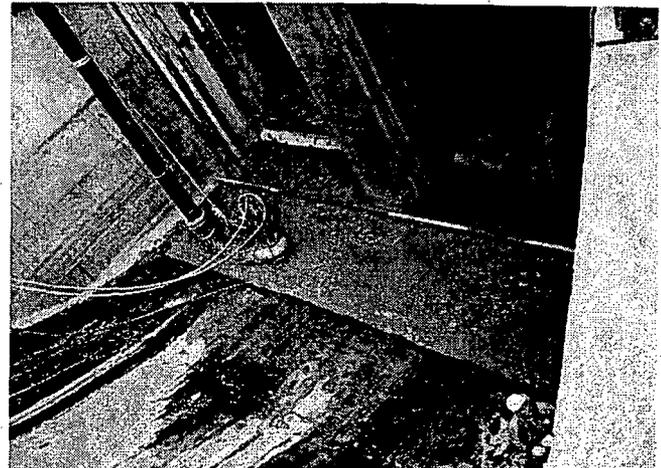
The main generator ready for brazing.



Crews work on the sliding gate valves inside the cooling tower that redistribute the water pattern inside the tower.



Workers are performing inspection and cleaning activities on the makeup water supply line. The pipe brings make up water from the Susquehanna into the cooling tower basin.



Water from the cooling tower basin passes through these pipes to the four circulating water pumps. Then, it is pumped through the main condenser where it cools the steam coming from the main turbines and condenses it back into water.

Attachment 8 to PLA-6221
Section 401 - Clean Water Act Certification,
July 16, 1982

9.3-2

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

P.O. BOX 2063
Harrisburg, Pennsylvania 17120

717 787-2666

July 16, 1982

RECEIVED

JUL 30 1982

LEGAL DEPARTMENT

Mr. Robert L. Tedesco
Assistant Director for Licensing
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Tedesco:

The purpose of this letter is to inform you that the Department of Environmental Resources issued NPDES Permit PA 0047325 on July 31, 1979 to the Pennsylvania Power and Light Company for operational wastewater discharges from the Susquehanna Steam Electric Station.

In view of the above, it is not necessary for the Department to issue a water quality certification for the above facilities pursuant to Section 401 (a) (1) of the Clean Water Act.

Very truly yours,

Louis W. Bercheni, Director
Bureau of Water Quality Management

LWB:PTS:cm

cc:Mr. James M. Cutchin IV, Esq. ✓
Mr. Pawlush
Mr. Bercheni
Mr. Adler
File
30-Day File

**Attachment 9 to PLA-6221
Letter to USFWS From Ichthyological
Associates, Inc.
November 7, 1983.**

ICHTHYOLOGICAL ASSOCIATES, INC.

SUSQUEHANNA RIVER ECOLOGICAL STUDY

EDWARD C. RANEY, Ph.D.
President

301 Forest Drive
Ithaca, N.Y. 14850
(607) 257-7121

R.D. 1, BERWICK, PA. 18603
(717) 542-2191

THEODORE V. JACOBSEN, M.S.
Vice-President and Project Director

WILLIAM F. GALE, Ph.D.
Aquatic Research Director

JAMES D. MONTGOMERY, Ph.D.
Terrestrial Research Director

WILLIAM G. DEUTSCH, M.S.
Research Coordinator

7 November 1983

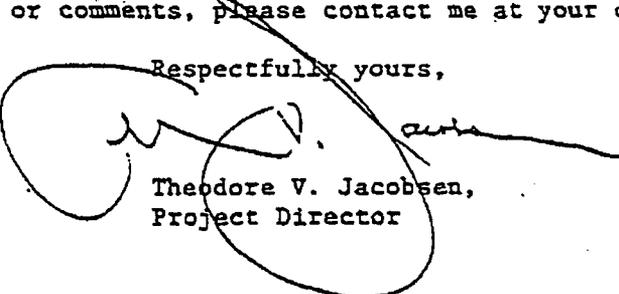
Richard St. Pierre
U.S. Fish & Wildlife Service
PO Box 1673
Harrisburg, PA 17105-1673

Dear Dick:

Pursuant to your request, checks were made for the occurrence of juvenile American shad on the intake screens of the Susquehanna Steam Electric Station (22 Aug-14 Oct 1983) and the Hunlock Steam Electric Station (17 Aug-14 Oct 1983). Personnel from Ichthyological Associates conducted the survey at Susquehanna and plant staff from UGI monitored their own screens at Hunlock. At both power plants, screens were washed three times daily (once per 8-hour shift). At Susquehanna, cumulative washes were checked for fish once each day, Monday through Friday (washes from Saturday and Sunday were included in the Monday wash). At Hunlock, each wash was checked for fish while it was in progress.

No juvenile shad were collected at either power plant during these surveys. If you have any questions or comments, please contact me at your convenience.

Respectfully yours,



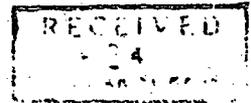
Theodore V. Jacobsen,
Project Director

TVJ/msh

**Attachment 10 to PLA-6221
Ecology III, Inc. September 1991. Letter from
Ecology III Inc. to USFWS regarding its 1991
monitoring program for impinged juvenile
American shad at the
Susquehanna River water intake.**



Ecology III, Inc.



ENVIRONMENTAL SERVICES



R.R.#1 — Berwick, PA 18603
(717) 542-2191

SUSQUEHANNA SES ENVIRONMENTAL LABORATORY FAX NO. (717) 542-2193

19 September 1991

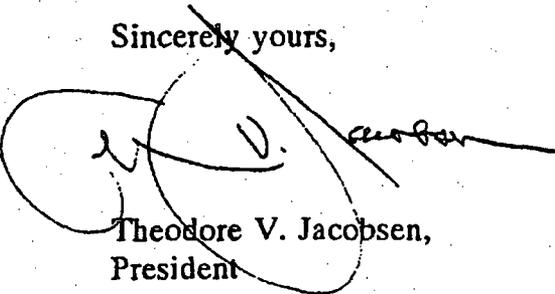
Mr. Richard St. Pierre
U.S. Fish & Wildlife Service
1721 North Front Street, Suite 105
Harrisburg, PA 17102

Dear Dick:

Pursuant to our discussion on 11 September 1991, Ecology III will cancel its autumn 1991 monitoring program for impinged juvenile American shad at the Susquehanna River water intake of the Pennsylvania Power and Light Company's Susquehanna Steam Electric Station near Berwick. As you pointed out, there is very little likelihood that many of the adult shad stocked above the York Haven Dam this spring dispersed this far up river to spawn because of low river flows caused by the ongoing drought in Pennsylvania. We have rescheduled impingement monitoring for autumn 1992 in anticipation that the drought will be over by then.

If you have any questions or comments, please contact me at your convenience.

Sincerely yours,



Theodore V. Jacobsen,
President

/msb

c: J. S. Fields (PP&L)

Attachment 11 to PLA-6221
Letter from Susquehanna River Anadromous
Fish Restoration Committee to PPL.
September 11, 1992.

**SUSQUEHANNA RIVER
ANADROMOUS FISH RESTORATION COMMITTEE**



Members

Maryland Department of Natural Resources
New York Division of Fish and Wildlife
Pennsylvania Fish and Boat Commission
Pennsylvania Power & Light Company
Philadelphia Electric Company
Safe Harbor Water Power Commission
Susquehanna River Basin Commission
United States Fish and Wildlife Service
York Haven Power Company

Secretary

Susquehanna River Fisheries Coordinator
U.S. Fish and Wildlife Service
1721 North Front Street, Suite 105
Harrisburg, PA 17102
Telephone: 717-238-6425
FAX: 717-238-0495

September 11, 1992

Jerome S. Fields (A9-3)
PA Power & Light Company
Two North Ninth Street
Allentown, PA 18101

Dear Mr. Fields,

During April through mid-June this year, a total of 25,721 American shad were collected in the fish lifts at Conowingo Dam. Of these, 15,386 were transported and released above York Haven Dam at Middletown, PA with about a 92% survival rate. Most fish were taken during May. Juvenile shad collections in the vicinity of Columbia and Wrightsville in late July and August indicated successful spawning in this vicinity.

Our past analyses of adult shad movements following release at Middletown showed only modest upstream migration, with some fish reaching Sunbury on the mainstem and Lewistown on the Juniata River. Considering the relatively advanced stage of maturation of most fish and with the peak of abundance occurring late in the season, it is doubtful that shad successfully migrated into the North Branch in 1992. For these reasons I do not believe it is necessary to sample for juvenile shad at the cooling water intakes of the Susquehanna SES at Beach Haven this fall.

We appreciate your continued interest and PP&L's involvement with this program. The situation regarding likelihood of shad reproduction near your facility will be reevaluated each year.

Sincerely,

Richard St. Pierre
Susquehanna River Coordinator



Attachment 12 to PLA-6221
Letter from Susquehanna River Anadromous
Fish Restoration Committee to PPL
August 24, 1993.

**SUSQUEHANNA RIVER
ANADROMOUS FISH RESTORATION COMMITTEE**

RECEIVED
AUG 26 1993
ENVIRONMENTAL SERVICES

Members

Maryland Department of Natural Resources
New York Division of Fish and Wildlife
Pennsylvania Fish and Boat Commission
Pennsylvania Power & Light Company
Philadelphia Electric Company
Safe Harbor Water Power Commission
Susquehanna River Basin Commission
United States Fish and Wildlife Service
York Haven Power Company

Secretary

Susquehanna River Fisheries Coordinator
U.S. Fish and Wildlife Service
1721 North Front Street, Suite 105
Harrisburg, PA 17102
Telephone: 717-238-6425
FAX: 717-238-0495

August 24, 1993

Jerry Fields

PA Power & Light Company
Two North Ninth Street
Allentown, PA 18101

Dear Mr. Fields,

SRAFRFC contractors collected about 13,400 American shad at Conowingo Dam during May 4 - June 15, 1993. Of these, about 11,400 were transported and released above all dams at Middletown, PA. Based on early season juvenile collections in the lower river, we expect that most spawning occurred in the river reach from Columbia to Harrisburg, PA. Interestingly, spawning schools were observed in the Juniata River in late June.

Because of the late capture season and relatively small number of adult shad released above dams in 1993, I would not expect that substantial numbers of spawning fish migrated beyond Sunbury. Therefore, it is not necessary for PP&L to monitor intake screens at Susquehanna SES for juvenile shad this fall. If your consultants do collect any juvenile shad in the North Branch during routine surveys, I would appreciate having them frozen for otolith analysis.

Sincerely,



Richard St. Pierre
Susquehanna River Coordinator



Attachment 13 to PLA-6221
Letter from Susquehanna Anadromous Fish
Restoration Committee to PPL
September 27, 1994

**SUSQUEHANNA RIVER
ANADROMOUS FISH RESTORATION COMMITTEE**



Members

Maryland Department of Natural Resources
New York Division of Fish and Wildlife
Pennsylvania Fish and Boat Commission
Pennsylvania Power & Light Company
Philadelphia Electric Company
Safe Harbor Water Power Commission
Susquehanna River Basin Commission
United States Fish and Wildlife Service
York Haven Power Company

Secretary

Susquehanna River Fisheries Coordinator
U.S. Fish and Wildlife Service
1721 North Front Street, Suite 105
Harrisburg, PA 17102
Telephone: 717-238-6425
FAX: 717-238-0495

September 27, 1994

Jerry Fields (A9-3)
PA Power & Light Company
Two North Ninth Street
Allentown, PA 18101

Dear Mr. Fields,

During late April through early June, 1994, about 32,300 American shad were collected at Conowingo Dam and most of these were transported to release sites at Middletown and Columbia, PA. Large numbers of shad were observed in the Juniata River, but I received no record of fish being taken near Sunbury or points further north. Also, with the inflation of the Sunbury fabric dam in mid-May, few shad released below Harrisburg would have had time to reach North Branch waters before damming.

Considering these limitations, and the likelihood that little spawning could have occurred near PP&L's Susquehanna SES at Beach Haven, I do not recommend sampling for shad at that site this fall. Please call if we need to discuss this further.

Sincerely,

Richard St. Pierre
Susquehanna River Coordinator



Attachment 14 to PLA-6221
PJM Planners Recommend New Pennsylvania to
New Jersey Transmission Line

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AP Associated Press

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Finance Search



More than a trade. More for the trader.



AP

2 Major Power Lines Recommended to PJM

Friday May 11, 3:10 pm ET

By Marc Levy, Associated Press Writer

Study Group Recommends Grid Operator Back 2 Massive Power Lines

HARRISBURG, Pa. (AP) -- The company that operates the mid-Atlantic electricity grid should endorse two major new power transmission lines, its advisory group concluded.

The new transmission lines, one from West Virginia to Maryland and another from Pennsylvania to New Jersey, are designed to relieve existing lines on the densely populated eastern seaboard, including some that are expected to become overloaded as early as 2012. The new power lines could also help bring surplus electricity from Appalachia and the Midwest to places where power is more expensive.

ADVERTISEMENT



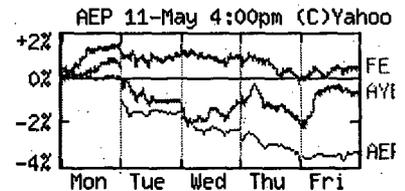
On Wednesday, a study group formed by Valley Forge-based PJM Interconnection recommended the projects out of a host of many others that have been proposed by power companies. Both lines will go before PJM's board of managers at its June 22 meeting before the utilities approach state regulators about the plans.

PJM has no regulatory authority over the power lines, but the company's opinion carries weight with state utility regulators. The

state regulators typically have approval authority over power lines, although the possibility now exists that federal authorities can override them.

Both lines would fall into one of two special areas proposed by the Department of Energy as critical to the nation's electric transmission needs. Under a 2005 law, the federal government has the power to override state regulators who balk at such projects planned for those designated areas.

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PJM spokesman Terry Williamson said there are only rough estimates of the paths the lines may take.

The larger of the two power lines would span about 300 miles, beginning at American Electric Power Co.'s John Amos coal-fired power plant near St. Albans, W.Va.

The line would run northeast through West Virginia's scenic Allegheny Highlands carrying 765 kilovolts, the highest-voltage power line in use, before dropping to 500 kilovolts for the trip through rural central Maryland to a substation to be built near Damascus, Md.

It would be built by Columbus, Ohio-based AEP and Allegheny Energy Inc. of Greensburg, Pa., and is one leg of a larger, \$3 billion project proposed last year by AEP to ultimately extend into New Jersey.

The other line would travel 130 miles, beginning at PPL Corp.'s Susquehanna nuclear power plant in Berwick in northeastern Pennsylvania. The 500-kilovolt line would travel northeast past Wilkes-Barre and Scranton, head southeast across the Delaware Water Gap National Recreation Area and northern New Jersey before ending at the Roseland substation near Newark.

The line would be built by Allentown-based PPL; FirstEnergy Corp. of Akron, Ohio; and Public Service Enterprise Group of Newark.

PJM oversees the power grid that serves more than 50 million people in 13 eastern states and the District of Columbia.

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Attachment 15 to PLA-6221
PPL Susquehanna Riverlands Hunting Guide

For more information, write or call:
**Susquehanna Riverlands
 PPL Corporation**
 634 Salem Blvd.
 Berwick, PA 18603
 1-800-354-8383
 E-mail: pplpreserves@pplweb.com
www.pplprojectearth.com



**Be Seen!
 Wear
 Fluorescent
 Orange**
 Please hunt safely at all times
 Pennsylvania
 Game Commission
 1-877-877-9357

Rules and Regulations

All Pennsylvania game laws apply and are enforced by state wildlife conservation officers and their deputies.

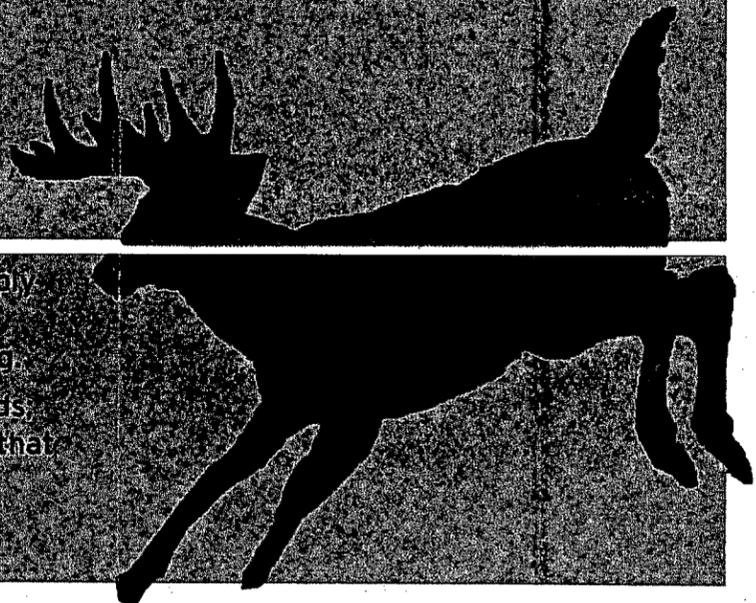
- Motor vehicles are prohibited on any lands, easements for transmission lines and trails.
- It is unlawful to hunt in unharvested fields.
- Do not enter adjoining land without the owner's permission.
- Building of fires is prohibited.
- Observe safety zones. Hunt at least 150 yards from any occupied structure.

Remember! Hunting is a privilege, not a right!

Pennsylvania Game Commission-
 Northeast Region Office:
 1-877-877-9357

Public hunting provided by
 PPL Corporation in cooperation with the
 Pennsylvania Game Commission

- You are required to comply with fluorescent orange regulations while hunting.
- No permanent tree stands, no portable tree stands that damage trees.



Land owned by PPL

is operated under
 a multiple-use land
 management program.
 PPL provides for soil and
 water conservation,
 wildlife-habitat improvement
 and protection of open space
 and natural areas.

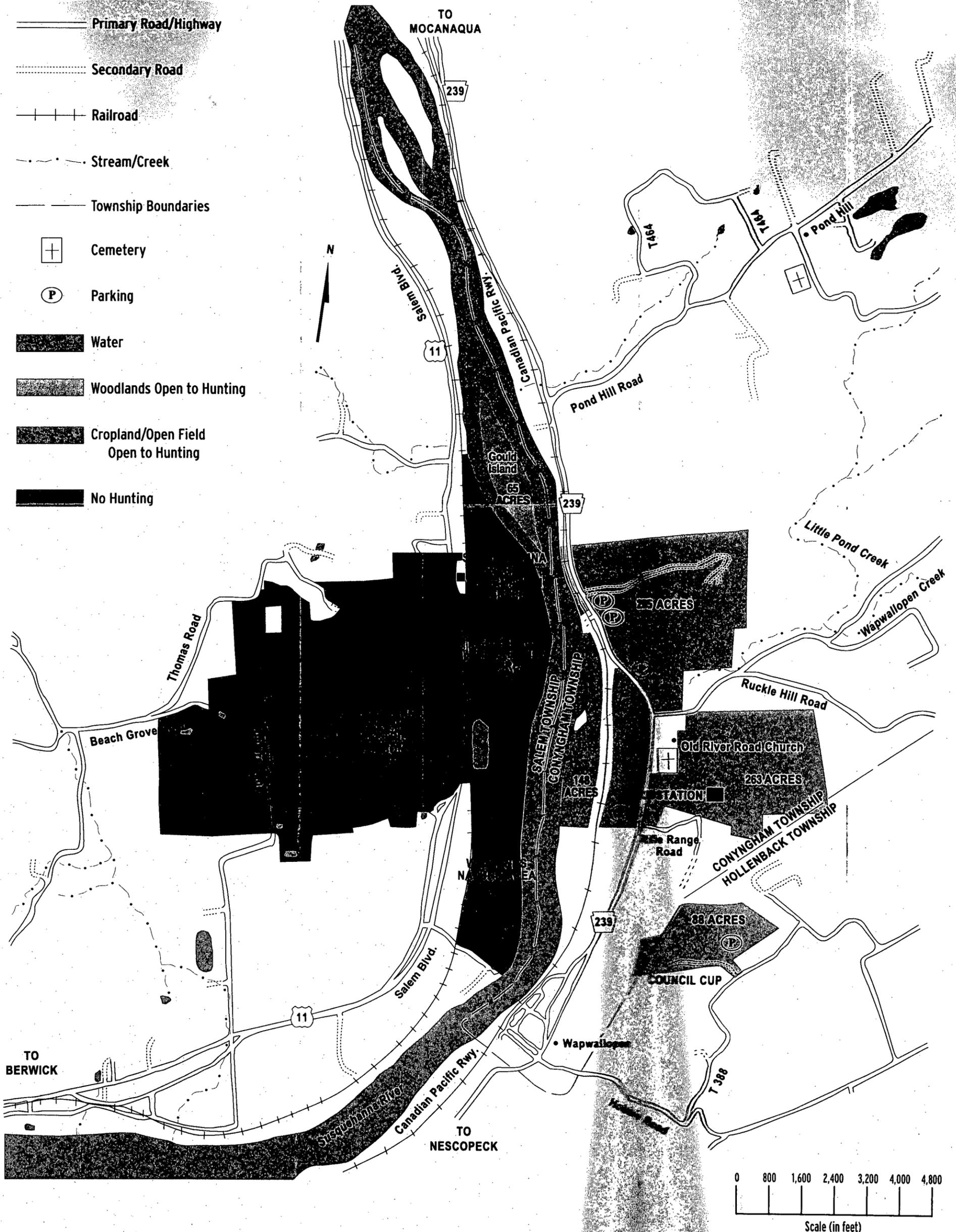
For more information, write or call:

**Susquehanna Riverlands
 PPL Corporation**
 634 Salem Blvd.
 Berwick, PA 18603
 1-800-354-8383

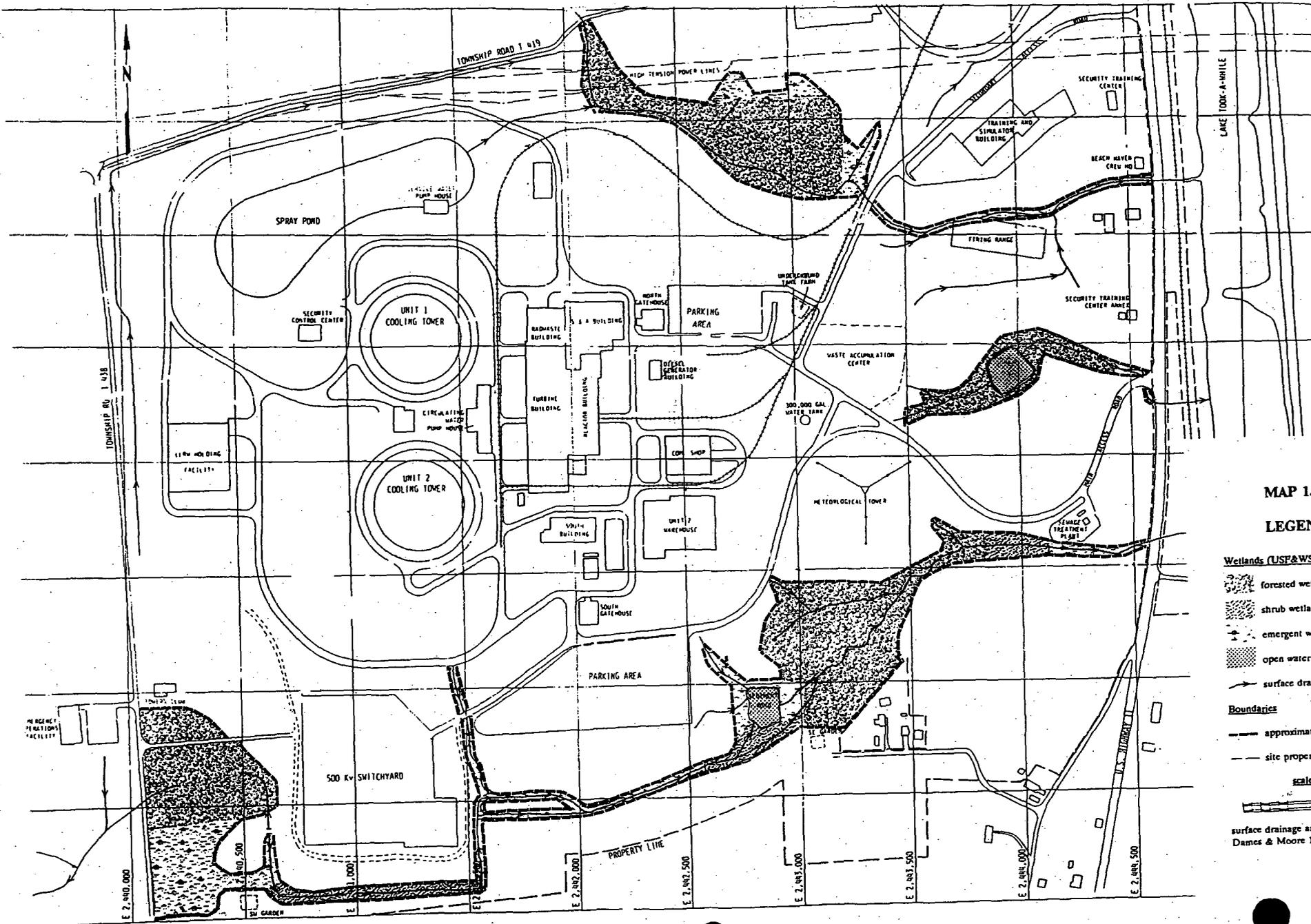
E-mail: pplpreserves@pplweb.com
www.pplprojectearth.com

PPL's Susquehanna Riverlands Hunting Land

859 acres open to hunting



Attachment 16 to PLA-6221
Wetland Map On-Site



MAP 1.
LEGEND

- Wetlands (USF&WS System)**
- forested wetland (palustrine)
 - shrub wetland (palustrine)
 - emergent wetland (palustrine)
 - open water (lacustrine)
 - surface drainage (riverine)
- Boundaries**
- approximate wetland boundary
 - site property boundary
- Scale**
-
- surface drainage and base map from Dames & Moore 1986.

Attachment 17 to PLA-6221
Air Quality Permit (Entire Permit)



Pennsylvania Department of Environmental Protection

2 Public Square
Wilkes-Barre, PA 18711-0790
November 19, 2003

Northeast Regional Office

570-826-2511
Fax 570-826-2357

PPL Susquehanna, LLC
769 Salem Boulevard
Berwick, PA 18603

Attention: Jerrold McCormick, Environmental Scientist - Nuclear

Dear Mr. McCormick:

Enclosed please find the Air Quality Program State Only Operating Permit No. 40-00027.

I suggest that you carefully read your permit and all special conditions accompanying it, to assure all of these conditions are satisfied.

By copy of this letter, we are informing Salem Township, Luzerne County of the issuance of your permit.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S., Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

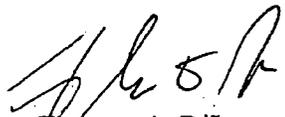
IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.



If the Department can be of further assistance, please contact Norman Frederick Air Quality Program at the above telephone number.

Sincerely,



Thomas A. DiLazaro
Program Manager
Air Quality Program

Enclosures

cc: Luzerne County
Salem Township



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY OPERATING PERMIT

Issue Date: November 24, 2003

Effective Date: November 24, 2003

Expiration Date: November 24, 2008

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: 40-00027

Synthetic Minor

Federal Tax Id - Plant Code: 23-3022601-12

Owner Information

Name: PPL SUSQUEHANNA LLC
Mailing Address: 769 SALEM BOULEVARD
BERWICK, PA 18603

Plant Information

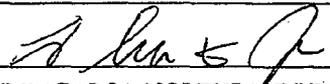
Plant: PPL SUSQUEHANNA LLC/SUSQUEHANNA SES
Location: 40 Luzerne County 40964 Salem Township
SIC Code: 4911 Trans. & Utilities - Electric Services

Responsible Official

Name: RICHARD L ANDERSON
Title: VICE PRESIDENT NUCLEAR OP
Phone: (570) 542 - 3883

Permit Contact Person

Name: JERROLD L MCCORMICK
Title: ENV. SCIENTIST-NUCLEAR
Phone: (570) 542 - 3014

[Signature] 
THOMAS A DILAZARO, NORTHEAST REGION AIR PROGRAM MANAGER

**Section A. Table of Contents****Section A. Facility/Source Identification**

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Section B. General State Only Requirements

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- #002 Operating Permit Duration.
- #003 Permit Renewal.
- #004 Operating Permit Fees under Subchapter I.
- #005 Transfer of Operating Permits.
- #006 Inspection and Entry.
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- C-I: Restrictions
- C-II: Testing Requirements
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- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
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- C-IX: Compliance Schedule

Section D. Source Level Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

- E-I: Restrictions
- E-II: Testing Requirements
- E-III: Monitoring Requirements
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**Section A. Table of Contents**

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- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements
- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

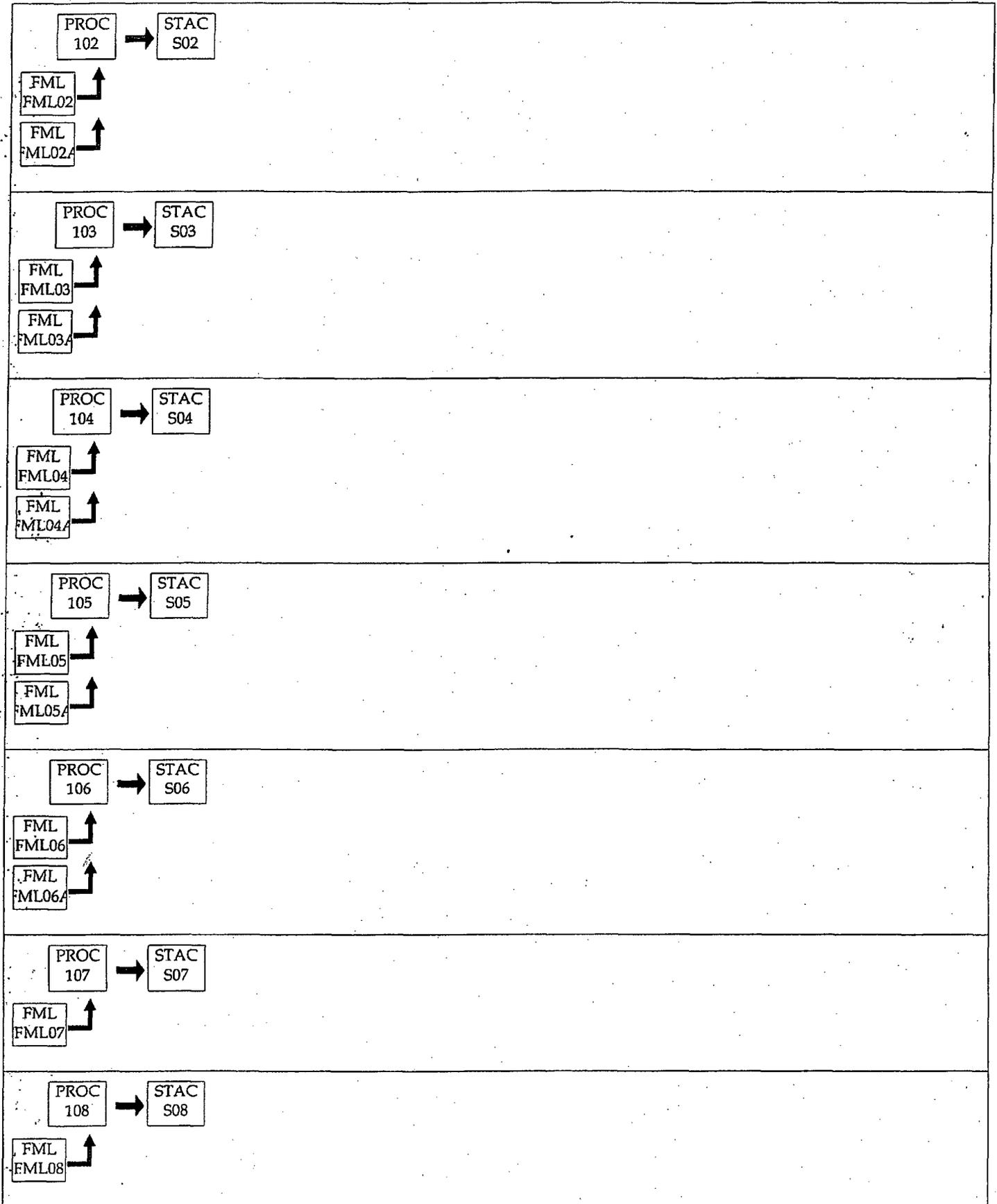
Section G. Emission Restriction Summary**Section H. Miscellaneous**

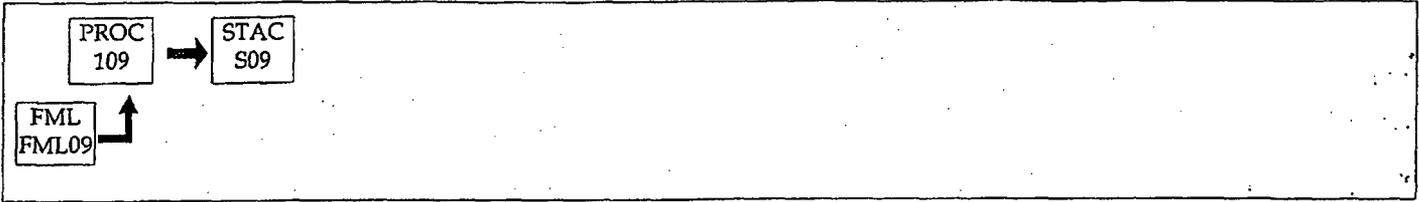
Section A Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	EMERGENCY GENERATOR A		
102	EMERGENCY GENERATOR B		
103	EMERGENCY GENERATOR C		
104	EMERGENCY GENERATOR D		
105	EMERGENCY GENERATOR E		
106	SECURITY DIESEL GENERATOR		
107	FIRE PUMP DIESEL		
108	BACKUP FIRE PUMP		
109	STANDBY DIESEL (BLUE MAX)		
FML01	GENERATOR A DIESEL FUEL TANK		
FML01A	GENERATOR A DAY TANK		
FML02	GENERATOR B DIESEL FUEL TANK		
FML02A	GENERATOR B DAY TANK		
FML03	GENERATOR C DIESEL FUEL TANK		
FML03A	GENERATOR C DAY TANK		
FML04	GENERATOR D DIESEL FUEL TANK		
FML04A	GENERATOR D DAY TANK		
FML05	GENERATOR E DIESEL FUEL TANK		
FML05A	GENERATOR E DAY TANK		
FML06	SECURITY DIESEL FUEL TANK		
FML06A	SECURITY DIESEL DAY TANK		
FML07	FIRE PUMP DIESEL FUEL TANK		
FML08	BACKUP FIRE PUMP DIESEL FUEL TANK		
FML09	STANDBY DIESEL (BLUE MAX) DIESEL FUEL TANK		
S01	GENERATOR A STACK		
S02	GENERATOR B STACK		
S03	GENERATOR C STACK		
S04	GENERATOR D STACK		
S05	GENERATOR E STACK		
S06	SECURITY DIESEL STACK		
S07	FIRE PUMP STACK		
S08	BACKUP FIRE PUMP STACK		
S09	STANDBY DIESEL (BLUE MAX) STACK		

PERMIT MAPS







**Section B. General State Only Requirements**

#001 [25 Pa. Code § 121.1]

Definitions.

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]

Operating Permit Duration.

(a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.

(b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)&(c)]

Permit Renewal.

(a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.

(b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

(c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).

(1) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

(d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.

(e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).

(f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

(a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):

(1) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension, modification, revision, renewal, and re-issuance of each operating permit or part thereof.

**Section B. General State Only Requirements**

(b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).

- (1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.
- (2) Three hundred dollars for applications filed during the 2000-2004 calendar years.
- (3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.

(c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund".

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]

Transfer of Operating Permits.

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]

Inspection and Entry.

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#007 [25 Pa. Code §§ 127.441 & 127.444]

Compliance Requirements.

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification

**Section B. General State Only Requirements****(3) Denial of a permit renewal application**

(b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]**Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#009 [25 Pa. Code §§ 127.442(a) & 127.461]**Duty to Provide Information.**

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]**Revising an Operating Permit for Cause.**

This operating permit may be modified, revoked, reopened and reissued or terminated for cause if one or more of the following applies:

(a) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee has failed to submit a report required by the operating permit or an applicable regulation.

(d) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450 & 127.462]**Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:

(b) Administrative Amendments. The permittee shall make administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.



Section B. General State Only Requirements

(d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

#012 [25 Pa. Code § 127.441]

Severability Clause.

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

(b) The Department may disapprove or condition de minimis emission increases at any time.

(c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 cSt, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

**Section B. General State Only Requirements**

- (5) Laboratory equipment used exclusively for chemical or physical analysis.
- (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.
 - (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
 - (3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#014 [25 Pa. Code § 127.3]

Operational Flexibility.

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit modifications)
- (7) Subchapter H (relating to general plan approvals and general operating permits)

#015 [25 Pa. Code § 127.11]

Reactivation

- (a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code §

Section B. General State Only Requirements

127.11a(b).

#016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]

Circumvention.

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]

Reporting Requirements.

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

#019 [25 Pa. Code §§ 127.441(c) & 135.5]

Sampling, Testing and Monitoring Procedures.

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.



Section B. General State-Only Requirements

#020 [25 Pa. Code §§ 127.441(c) and 135.5]

Recordkeeping.

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

#021 [25 Pa. Code § 127.441(a)]

Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

#022 [25 Pa. Code § 127.447]

Alternative Operating Scenarios.

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

**SECTION C: Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations.
- (7) Sources and classes of sources other than those identified in paragraphs (1)-(6), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (i) the emissions are of minor significance with respect to causing air pollution; and
 - (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

002 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Site Condition #001 (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

003 [25 Pa. Code §123.31]**Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

004 [25 Pa. Code §123.41]**Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

005 [25 Pa. Code §123.42]**Exceptions**

The limitations of Site Condition #004 shall not apply to a visible emission in any of the following instances:

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in Site Condition #001 (relating to prohibition of certain fugitive emissions).

**SECTION C Site Level Requirements****# 006 [25 Pa. Code §129.14]****Open burning operations**

(a) No person may permit the open burning of material in an area outside of air basins in a manner that:

- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
- (3) The emissions interfere with the reasonable enjoyment of life or property.
- (4) The emissions cause damage to vegetation or property.
- (5) The emissions are or may be deleterious to human or animal health.

(b) Exceptions: The requirements of subsections (a) do not apply where the open burning operations result from:

- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.
- (6) A fire set solely for recreational or ceremonial purposes.
- (7) A fire set solely for cooking food.

II. TESTING REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

If requested by the Department, the company shall perform stack tests in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department, within the time specified by the Department.

008 [25 Pa. Code §139.1]**Sampling facilities.**

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

009 [25 Pa. Code §139.11]**General requirements.**

The following provisions are applicable to source tests for determining emissions from stationary sources:

- (1) Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.
- (2) The Department will consider for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted.

**SECTION C Site Level Requirements**

Information submitted to the Department shall include, as a minimum all of the following:

- (i) A thorough source description, including a description of any air cleaning devices and the flue.
- (ii) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.
- (iii) The location of the sampling ports.
- (iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO₂, O₂ and N₂), static and barometric pressures.
- (v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (vi) Laboratory procedures and results.
- (vii) Calculated results.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) A visual inspection of the facility shall be performed on a weekly basis to determine if fugitive or visible emissions are detectable at the facility.
- (b) Visible emissions may be measured according to the methods specified in Section C, Condition #010, or alternatively, plant personnel who observe any visible emissions will report the incident of visible emissions to the Department within four hours of each incident and make arrangements for a certified observer to verify the opacity of the visible emissions.

IV. RECORDKEEPING REQUIREMENTS.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a record of the results of the facilities visible and fugitive emission inspections. At a minimum, the permittee shall record the date, time, results of the inspection, and individual conducting the inspection.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of fuel type, fuel usage, and facility emission records at the facility. These records shall be updated on a monthly basis and the emissions shall be calculated on a 12-month rolling sum. All records shall be maintained for a period of not less than 5 years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The company, within one (1) hour of knowledge of an occurrence, shall notify the Department at 570-826-2511, of any malfunction of the source(s) or associated air cleaning device(s) which result in, or may possibly be resulting in, the emission of air contaminants in excess of the limitation specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection or in excess of the limitations specified in any condition contained herein or which otherwise results in, or may possibly be resulting in,

**SECTION C Site Level Requirements**

noncompliance with the requirements specified in any condition contained herein. A written report shall be submitted to the Department within two (2) working days following the incident describing the malfunctions and corrective actions taken.

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.



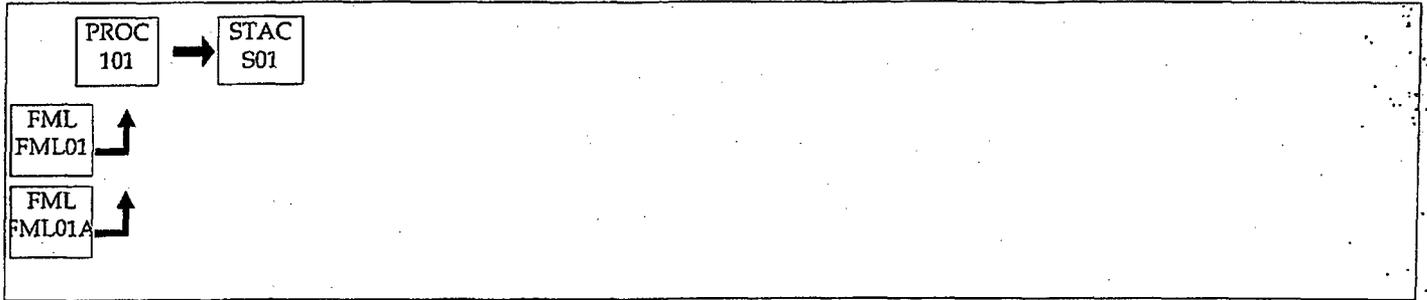
SECTION D: Source Level Requirements

Source ID: 101

Source Name: EMERGENCY GENERATOR A

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #1



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).



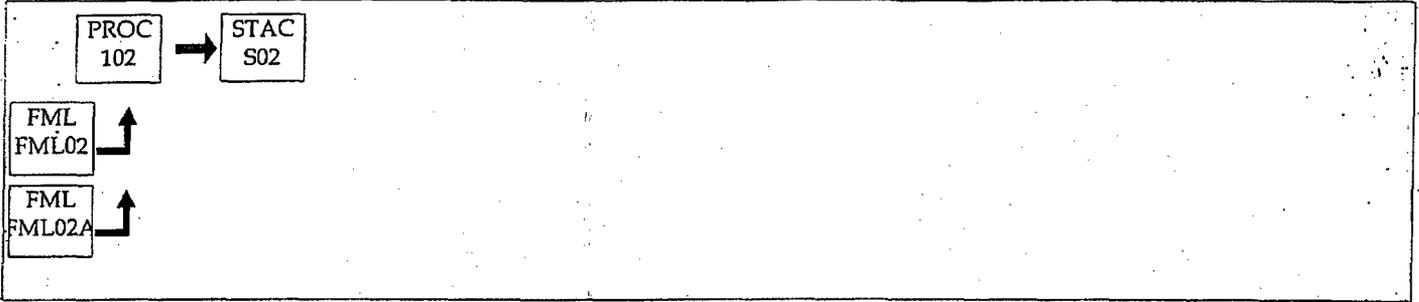
SECTION D. Source Level Requirements

Source ID: 102

Source Name: EMERGENCY GENERATOR B

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #1



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

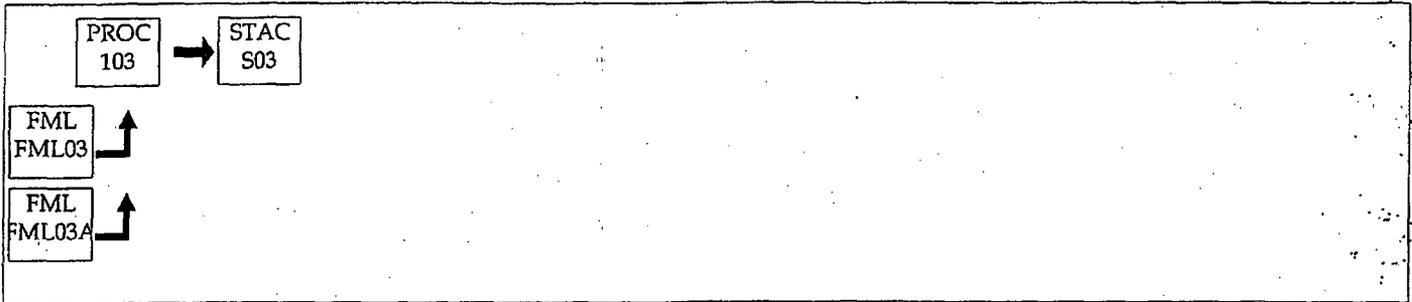
**SECTION B: Source Level Requirements**

Source ID: 103

Source Name: EMERGENCY GENERATOR C

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

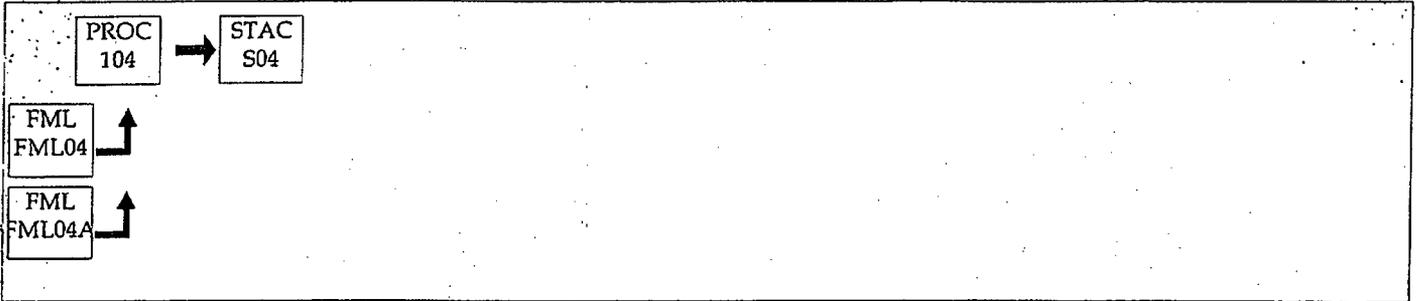
SECTION D. Source Level Requirements

Source ID: 104

Source Name: EMERGENCY GENERATOR D

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

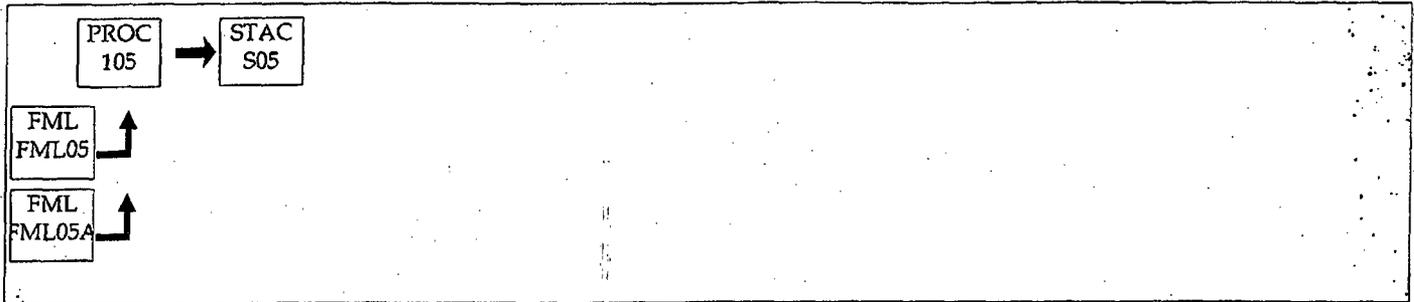
SECTION D Source Level Requirements

Source ID: 105

Source Name: EMERGENCY GENERATOR E

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

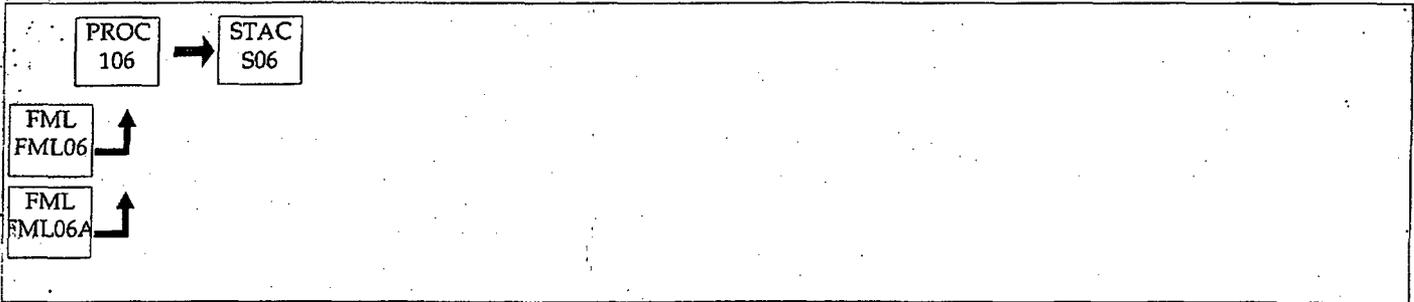
SECTION D. Source Level Requirements

Source ID: 106

Source Name: SECURITY DIESEL GENERATOR

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #2

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

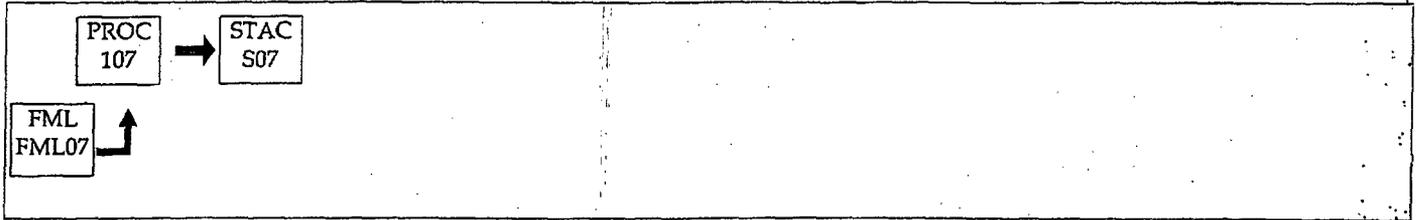
**SECTION D - Source Level Requirements**

Source ID: 107

Source Name: FIRE PUMP DIESEL

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #2

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

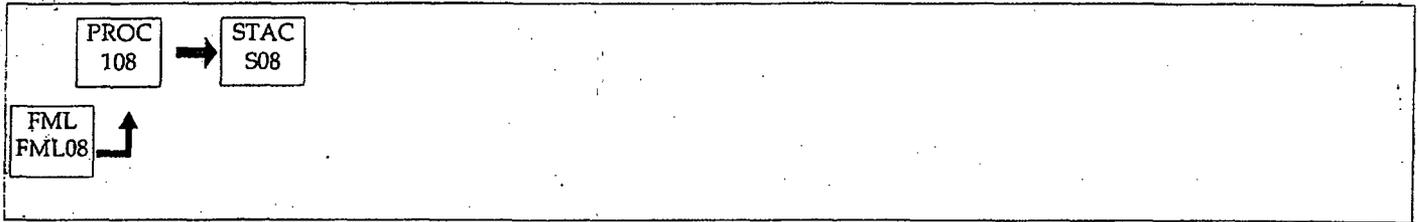
**SECTION D: Source Level Requirements**

Source ID: 108

Source Name: BACKUP FIRE PUMP

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #2

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

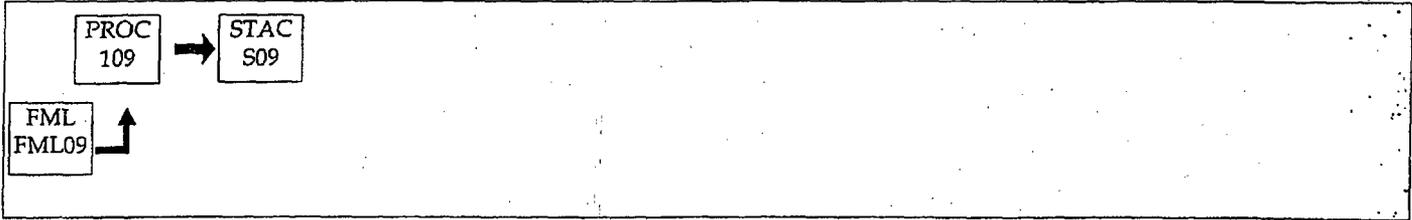


SECTION D: Source Level Requirements

Source ID: 109 Source Name: STANDBY DIESEL (BLUE MAX)

Source Capacity/Throughput:

This source occurs in the following groups: GROUP #2



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).



SECTION E. Source Group Restrictions.

Group Name: GROUP #1
Group Description: Five (5) Large Emergency Diesel Generators
Sources included in this group:

ID	Name
101	EMERGENCY GENERATOR A
102	EMERGENCY GENERATOR B
103	EMERGENCY GENERATOR C
104	EMERGENCY GENERATOR D
105	EMERGENCY GENERATOR E

I. RESTRICTIONS.

Emission Restriction(s).

# 001	[25 Pa. Code §127.441]
Operating permit terms and conditions.	
The hours of operation for all five (5) generators combined shall not exceed 1000 hours per year.	

II. TESTING REQUIREMENTS.

# 002	[25 Pa. Code §127.441]
Operating permit terms and conditions.	
The permittee shall monitor the quantity and type of fuel burned. The type of fuel shall be determined by certified fuel tests provided by the supplier or through certified testing conducted through the permittee. This testing shall, at a minimum, detail the sulfur and ash content of the fuel.	

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

# 003	[25 Pa. Code §127.441]
Operating permit terms and conditions.	
The permittee shall maintain a record of the hours of operation of each of the generators. These records shall be maintained at the facility and shall be made available to the Department upon request.	

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).



SECTION E: Source Group Restrictions.

Group Name: GROUP #2
Group Description: Four (4) Small Emergency Diesel Generators
Sources included in this group:

ID	Name
106	SECURITY DIESEL GENERATOR
107	FIRE PUMP DIESEL
108	BACKUP FIRE PUMP
109	STANDBY DIESEL (BLUE MAX)

I. RESTRICTIONS.

Emission Restriction(s).

# 001	[25 Pa. Code §127.441] Operating permit terms and conditions. The hours of operation for all four (4) generators combined shall not exceed 400 hours per year.
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II. TESTING REQUIREMENTS.

# 002	[25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall monitor the quantity and type of fuel burned. The type of fuel shall be determined by certified fuel tests provided by the supplier or through certified testing conducted through the permittee. This testing shall, at a minimum, detail the sulfur and ash content of the fuel.
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III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

# 003	[25 Pa. Code §127.441] Operating permit terms and conditions. The permittee shall maintain a record of the hours of operation of each of the generators. These records shall be maintained at the facility and shall be made available to the Department upon request.
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V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).



SECTION F: Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.



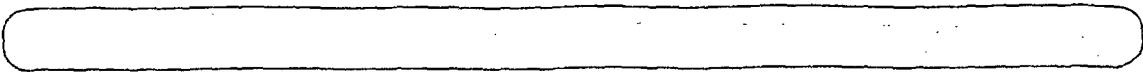
SECTION C: Emission Restriction Summary

No emission restrictions listed in this section of the permit.

**SECTION H Miscellaneous.**

The following activities are considered to be of minor significance by the Department:

- 1) Sand Blasting Operation
- 2) Spray Painting Operation
- 3) Solvent Parts Washers



***** End of Report *****

Attachment 18 to PLA-6221
Site Aerial View (Prior to Construction)



REFERENCE:

THE BASE FOR THIS DRAWING WAS PREPARED FROM A PORTION OF AN AERIAL PHOTOGRAPH BY VERNON GRAPHICS, INC. FOR PENNSYLVANIA POWER & LIGHT COMPANY, ENTITLED "PPL-23-145", DATED 5-23-66, AND A VICINITY MAP BY BECTEL, DRAWING NO. SK-A-44, DATED 6-14-72.



**PENNSYLVANIA POWER & LIGHT COMPANY
SUSQUEHANNA STEAM ELECTRIC STATION
UNITS 1 AND 2
APPLICANT'S ENVIRONMENTAL REPORT**

SITE AERIAL VIEW

JAMES S. MOORE

FIGURE 1.1.1

Attachment 19 to PLA-6221
Range Expansion of the Asiatic Clam, *Corbicula*
***Fluminea*, in the North Branch of the**
Susquehanna River

RESEARCH NOTE

RANGE EXPANSION OF THE ASIATIC CLAM, *CORBICULA FLUMINEA*, INTO THE NORTH BRANCH OF THE SUSQUEHANNA RIVER

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ABSTRACT

The Asiatic clam, *Corbicula fluminea*, has been in the main stem and West Branch of the Susquehanna River for at least two decades. This report documents the extension of its range into the north branch. My discovery of *C. fluminea* in the north branch seems to coincide with boating/angling activities near state-owned boat launches. However, there is the possibility that the clam was introduced into this branch of the river via the aquaria pet trade. Raw water users along the north branch would be well advised to increase monitoring efforts and prepare biofouling treatment techniques. [J PA Acad Sci 76(1): 40-42, 2001]

INTRODUCTION

Since its introduction to the Pacific coast of the United States in 1938, the Asiatic clam, *Corbicula fluminea*, has invaded many of the nation's river systems (Graney et al. 1980; McMahon and Bogan 2001). This exotic mollusk has a history of clogging the piping systems of raw water users throughout the United States. Its extraordinary rate of reproduction (hermaphroditic), fast growth rate, and small juveniles make it exceptional at infesting these systems. Consequently, many

millions of dollars have been spent nationwide to monitor and control this species which, arguably prior to the invasion of the zebra mussel, was the most economically costly species introduced into North America (Isom 1986). Furthermore, its effects on the biodiversity of aquatic ecosystems have been noted. The appearance of *C. fluminea* in southern rivers has been associated with significant declines among populations of native clam species (Waters 2000).

C. fluminea invaded Pennsylvania's waters at least as early as 1973, and was first reported in the Susquehanna River, below Conowingo Dam in August 1980 (Nichols and Domermuth 1981). Robert B. Domermuth, PPL Inc., and Eric McClellan, Normandeau Associates, Inc., generously recreated the following chronology of *Corbicula*'s upstream movement in the Susquehanna. In June 1984, one live clam was found near Three Mile Island, but none were found there again until 1989. In April of 1985, live clams were discovered near Muddy Run, and in August at Conowingo Pond and the Conestoga River (Susquehanna tributary below Safe Harbor Dam). By May 1986, the clams were discovered as far north as Lake Aldred, some 20 miles above Conowingo Dam. Clams were found near Brunner Island in October 1987, and in Raystown Lake in September 1988 (drains into Juniata River). It has been estimated that *Corbicula* reached the confluence of the north and West Branches by at least 1990, and they were found near Watsonstown on the West Branch in September 1995.

¹Submitted for publication 12 December 2001; accepted 8 March 2002.

MATERIALS AND METHODS

I have conducted annual surveys along the north branch of the Susquehanna River for most of the last decade (Figure 1). While the primary purpose of these surveys was to determine if the zebra mussels, *Dreissena polymorpha*, had invaded the Susquehanna, they also provided an opportunity to monitor for the presence of *C. fluminea*. My surveys involved traveling to various sites along the north branch between Sunbury and Mehoopany. Generally, shoreline areas were examined for the presence of live clams or relic shells, and at times a boat was used to examine shoreline area of islands in the river. As a result, I commonly observed Asiatic clams at the confluence of the branches at Sunbury, but until now never within the north branch. Neither was *C. fluminea* observed by others who surveyed mollusks in the north branch (personal communication, Arthur Bogan, North Carolina Museum of Natural History, 12 November 2001).

RESULTS AND DISCUSSION

I first found *C. fluminea* shells in the vicinity of the Pennsylvania Fish and Boat Commission's (PFBC) boat launch near Danville (Figure 1). Proceeding upriver, I collected both relic shells and live specimens near Bloomsburg, where I believe that the current northernmost edge of its range likely exists. This too was in the vicinity of a PFBC boat launch, which strongly suggests that the primary vector for the expansion of *C. fluminea* into the north branch is due to boating/angling activities. The northernmost specimens in my survey were found approximately midway between the Bloomsburg and Interstate 80 bridges. I estimate that Asiatic clams now inhabit at least 135 river miles of the Susquehanna along the main stem and north branch in Pennsylvania.

Boating anglers, however, may not be the only vector responsible for Asiatic clams in the north branch. In the mid 1990s, I discovered that a department store in

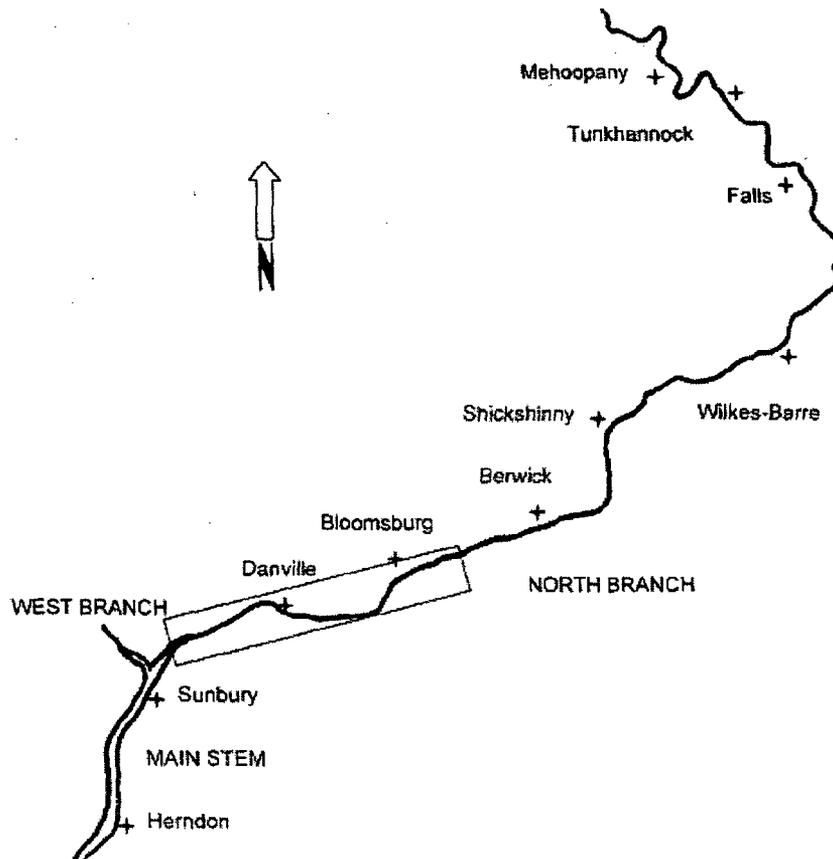


FIGURE 1. Sampling sites for *Corbicula fluminea* along the main stem and north branch of the Susquehanna River. Stars depict the sampling locations and the rectangle indicates the expanded range of Asiatic clams in the North Branch.

Bloomsburg was selling *C. fluminea* from their pet department. These were advertised as "golden clams-natural aquaria filters." I informed the store manager of the situation and, to their credit, they quickly removed the clams from the shelves. Conceivably, local aquaria enthusiasts who purchased clams in this area emptied their aquaria into the Susquehanna when they tired of their pets.

My survey did not involve an attempt to characterize the north branch population by age. Relic shell size at these sites range up to 19 mm across the anterior-posterior margin. Most of the shells collected were in the 10-14 mm range.

This expansion of *C. fluminea*'s range demands vigilance by raw water users along this branch of the Susquehanna River. Water users without monitoring programs, especially those between Sunbury and Bloomsburg, would be prudent to implement monitoring programs and develop control programs as applicable.

ACKNOWLEDGMENTS

This work was made possible with the support of PPL. My thanks to Dr. Arthur Bogan, Robert B. Domermuth, Eric McClellan, Theodore V. Jacobsen, Jerome S. Fields, and two anonymous reviewers for

their comments on the manuscript, and again to Bob and Eric for information on *C. fluminea*'s movement in the river.

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