

Exelon Nuclear
Peach Bottom Atomic Power Station
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Delta, PA 17314-9032

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Nuclear

April 16, 2001

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Subject: Annual Environmental Operating Report (Non-Radiological)
January 1, 2000 through December 31, 2000
Peach Bottom Atomic Power Station
Facility Operating License No. DPR-44, DPR-56
Dockets Nos. 50-277, 50-278

Gentlemen,

Enclosed is a copy of the Annual Environmental Operating Report (Non-Radiological), January 1, 2000 through December 31, 2000. This report is being submitted in compliance with Appendix B Technical Specification. Attached is a copy of the current NPDES Permit.

Sincerely,



J. Doering
Vice President,
Peach Bottom Atomic Power Station

mg
JD/GLJ/EJE:aa

Enclosure

cc: H. J. Miller, Administrator, Region I, USNRC
A. C. McMurtray, USNRC Senior Resident Inspector, PBAPS
Senior Project Manager, USNRC

C001

Peach Bottom Atomic Power Station
Units 2 & 3

2000
Annual Environmental Operating Report
(Non-Radiological)

January 1, 2000 – December 31, 2000

Facility Operating License No. DPR-44, DPR-56
Docket Nos. 50-277, 50-278

Exelon Corporation

1.0 Introduction:

This report provides the information required by Peach Bottom Atomic Power Station Appendix B Technical Specification, from January 1, 2000 to December 31, 2000.

2.0 Special Study Programs:

The annual fish out migration study was conducted during the fall of 2000. This study characterizes the number and species of the fish collected by the intake screens. The results of this study are in Table 1. This data collection fulfills two objectives, support of the Susquehanna River's American Shad restoration program and provides American Shad specimens to the Pennsylvania Fish and Boat Commission for otolith analysis to compare contribution of hatchery and wild fish.

3.0 Plant Changes:

There were no changes to the plant or plant operations, which affected the environmental impact of the facility.

4.0 Environmental Permit Changes:

The National Pollutant Discharge Elimination System (NPDES) Permit PA0009733 was amended in May 2000 as a result of the fish and habitat studies performed from 1996 to 1999. The amendment provided for zero cooling tower operation. The conditions requiring action are delineated in the amendment. If the river temperature exceeds 85 °F and river flow decreases below 3000 cfs, then the fish populations will be monitored for indication of distress. If the populations show signs of distress, then appropriate actions will be evaluated.

The NPDES permit was renewed December 1, 2000. It is effective until November 30, 2005. There were no major changes from the amended permit issued in May 2000.

Table 1

Number of fish collected during intake screen sampling by unit at Peach Bottom Atomic Power Station in fall, 2000.

Species	Unit 2	Unit 3	Total
American shad	54	46	100
Blueback herring	4	2	6
Alewife	2	0	2
Gizzard shad	431	861	1,292
Common carp	1	3	4
Channel catfish	40	60	100
Yellow bullhead	1	0	1
Comely shiner	2	0	2
Bluegill	54	151	205
Rock bass	3	1	4
Smallmouth bass	2	2	4
White crappie	8	8	16
Black crappie	0	1	1
Yellow perch	1	4	5
TOTAL	603	1,139	1,742



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200

NOV 3 2000

Southcentral Regional Office

717-705-4707
FAX - 717-705-4760

CERTIFIED MAIL NO. 7099 3220 0009 0712 2832

Ms. Lisa Quivers
PECO Energy Company
965 Chesterbrook Boulevard 62A-2
Wayne, PA 19087

Re: Industrial Waste
Peach Bottom Atomic Power Station
NPDES Permit No. PA 0009733
APS ID No. 316828
Peach Bottom Township, York County

Dear Ms. Quivers:

Your permit is enclosed. The following items are changed from the draft permit as a result of your comments dated October 20, 2000:

1. The address on page 1 is changed.
2. The typo to Clam-trol CT-2 on page 2 is corrected.
3. Outfall 005 is included with Outfall 002 on page 7.
4. Annual storm water inspection language is inserted on page 8.
5. The units "ml" on page 21 is corrected.
6. The cooling tower language in Part C I.F is changed.
7. The chemical additive Ultrion 8157 is added to the table on page 25.
8. The language to monitor boron that was in the previous permit is included in Part C I.G.

A Discharge Monitoring Report (DMR) and Supplemental Reporting Forms are included. The master DMR will be prepared and distributed by the U.S. Environmental Protection Agency (EPA) in the near future. Use the enclosed DMR Form until you receive a master from EPA. The reporting forms must be submitted to the Department and the EPA Regional Office as instructed in the permit and the enclosed Instruction Sheet.

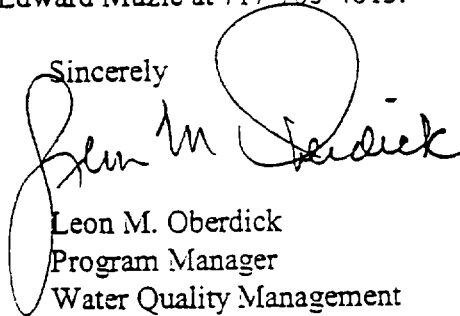
Ms. Lisa Quivers

- 2 -

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, PO 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 have any questions, please call Mr. Edward Muzic at 717-705-4813.

Sincerely

A handwritten signature in black ink, appearing to read "Leon M. Oberdick", is written over a large, circular, light-colored stamp or mark.

Leon M. Oberdick
Program Manager
Water Quality Management

Enclosures

cc: Robert Chominski, U.S. Environmental Protection Agency
Tracy Siglin, PECO Energy Company



Pennsylvania Department of Environmental Protection
WATER MANAGEMENT PROGRAM

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPDES PERMIT NO. PA 0009733

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

PECO Energy Company
Peach Bottom Atomic Power Station
1848 Lay Road
Delta, PA 17314

hereby authorized to discharge from a facility located in **Peach Bottom Township, York County** to the receiving waters named **Susquehanna River in Watershed 7-I (Kreutz - Muddy Creeks)** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B, and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON DECEMBER 1, 2000

AND EXPIRE AT MIDNIGHT, DECEMBER 1, 2005

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

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

PERMIT ISSUED: NOV 3 2000

PERMIT AMENDED: _____

BY: Leon M. Oberdick
Leon M. Oberdick
Program Manager
Southcentral Regional Office

PART A

LAT: 39°44'15"
LONG: 76°15'20"

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following discharge limitations and monitoring requirements apply:

A. Outfall 001, which receives wastewater from cooling water. ⁽²⁾

DISCHARGE LIMITATIONS ⁽¹⁾								MONITORING REQUIREMENTS	
Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)				Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum		
Flow (mgd)	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	XXX	Daily	Calculated
pH (S.U.)	XXX	XXX	XXX	From 6.0 to 9.0 inclusive				Daily	Grab
Total Residual Chlorine	XXX	XXX	XXX	XXX	XXX	XXX	0.2	Daily	Grab
Temperature	XXX	XXX	XXX	Monitor & Report				Continuous	"i-s"
Ammonia Nitrogen (CT-1)	XXX	XXX	XXX	Monitor & Report				(4)	Grab
Ammonia Nitrogen (CT-2)	XXX	XXX	XXX	Monitor & Report				(4)	Grab

Unless otherwise indicated, these are gross discharge limitations.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations(s): At Outfall 001 except where noted differently.

See Part C I.C. regarding Total Residual Chlorine.

Samples taken during application of respective additive.

PART A

LAT: 39°45'30"

LONG: 76°16'03"

B. Outfall 301, which receives wastewater from Wastewater Settling Basin. (2)

DISCHARGE LIMITATIONS ⁽¹⁾								MONITORING REQUIREMENTS	
Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)				Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum		
(mgd)	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	XXX	1/month	Estimate
ended Solids	XXX	XXX	XXX	30	XXX	100	100	1/month	Grab
nd Grease	XXX	XXX	XXX	15	XXX	20	30	1/month	Grab

Unless otherwise indicated, these are gross discharge limitations.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Wastewater Settling Basin Discharge Point.

PART A

LAT: 39°45'28"

LONG: 76°16'08"

C. Outfall 401, which receives wastewater from Auxiliary Boiler Blowdown. ⁽²⁾

DISCHARGE LIMITATIONS ⁽¹⁾								MONITORING REQUIREMENTS	
Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)				Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum		
/ (mgd)	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	XXX	(3)	Estimate
ended Solids	XXX	XXX	XXX	30	XXX	100	100	(3)	Grab
and Grease	XXX	XXX	XXX	15	XXX	20	30	(3)	Grab

Unless otherwise indicated, these are gross discharge limitations.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Auxiliary Boiler Blowdown Discharge Point.

Discharge parameter shall be monitored once per month when discharging.

PART A

LAT: 39°45'26"

LONG: 76°16'01"

1. Outfall 501, which receives wastewater from sewage treatment plant. ⁽²⁾

DISCHARGE LIMITATIONS ⁽¹⁾								MONITORING REQUIREMENTS	
Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)				Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum		
(mgd)	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	XXX	Daily	Measured
CBOD	XXX	XXX	XXX	25	XXX	XXX	50	2/month	8-hr comp
Suspended Solids	XXX	XXX	XXX	30	XXX	XXX	60	2/month	8-hr comp
Phosphorus	XXX	XXX	XXX	2	XXX	XXX	4	2/month	8-hr comp
Coliform	XXX	XXX	XXX	(3)				2/month	Grab

Unless otherwise indicated, these are gross discharge limitations.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Sewage Treatment Plant Discharge Point.

See Part C I.E. regarding disinfection.

PART A

LAT: 39°45'24"

LONG: 76°15'54"

E. Outfall 601, which receives wastewater from Dredging Rehandling Basin. ⁽²⁾

DISCHARGE LIMITATIONS ⁽¹⁾								MONITORING REQUIREMENTS	
Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)				Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum		
Flow (mgd)	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	XXX	(3)	Estimate
Suspended Solids	XXX	XXX	XXX	30	XXX	100	100	(3)	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	20	30	(3)	Grab

(1) Unless otherwise indicated, these are gross discharge limitations.

(2) Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Dredging Rehandling Basin Discharge Point.

(3) Discharge parameter shall be monitored once per month when discharging.

PART A

LAT: 39°45'29"
LONG: 76°15'49"

Outfalls 002 and 005, which receives wastewater from Raw Intake Screen Backwash Water. ⁽²⁾

DISCHARGE LIMITATIONS ⁽¹⁾								MONITORING REQUIREMENTS	
Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)				Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum		
	Discharge limited to Raw Intake Screen Backwash Only All debris collected on the intake screens shall be collected and not discharged back to the river.								

Unless otherwise indicated, these are gross discharge limitations.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfalls 002 and 005.

PART A

G. Monitoring Requirements for Storm Water Outfall 003 ⁽¹⁾

Parameter	MONITORING REQUIREMENTS ⁽³⁾		
	(2) Composite Sample (mg/l)	(2) Grab Sample (mg/l)	Monitor Frequency
5-day CBOD	Monitor & Report	Monitor & Report	1/year
Chemical Oxygen Demand	Monitor & Report	Monitor & Report	1/year
Total Suspended Solids	Monitor & Report	Monitor & Report	1/year
Total Phosphorus	Monitor & Report	Monitor & Report	1/year
Total Kjeldahl Nitrogen	Monitor & Report	Monitor & Report	1/year
Dissolved Iron	Monitor & Report	Monitor & Report	1/year
Oil and Grease	XXXX	Monitor & Report	1/year
pH (S.U.)	XXXX	Monitor & Report	1/year

Supplemental Footnotes:

See PART C.II - "REQUIREMENTS APPLICABLE TO STORM WATER OUTFALLS" for further conditions and instructions.

Collect and analyze both a grab and a composite sample, except for discharges from holding ponds or other impoundments with a retention period greater than 24 hours (estimated by dividing the volume of the detention pond by the estimated volume of storm water discharged during the 24 hours previous to the time that the sample is collected), where a minimum of one grab sample may be taken.

An annual inspection of the facility may be performed in lieu of monitoring the storm water parameters.

PART A

- H. Outfalls 004 and 006 through 014 (listed below) serve as storm water outfalls. There are, at this time, no specific effluent or monitoring requirements for these outfalls. However, the Department may reopen the permit when regulations for storm water discharges for Phase II facilities are enacted.

<u>Point Source</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Receiving Stream</u>
004	39°45'46"	76°16'12"	Susquehanna River
006	39°46'01"	76°16'23"	" "
007	39°46'00"	76°16'19"	" "
008	39°45'57"	76°16'18"	" "
009	39°45'55"	76°16'18"	" "
010	39°45'53"	76°16'15"	" "
011	39°45'50"	76°16'14"	" "
012	39°45'49"	76°16'13"	" "
013	39°45'44"	76°16'06"	" "
014	39°45'41"	76°15'59"	" "

PART A

II. DEFINITIONS

- A. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- B. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- C. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- D. "Average" refers to the use of an arithmetic mean, unless otherwise specified in this permit.
- E. "Geometric Average (mean)" means the average of a set of sample results given by the root of their product.
- F. "Average monthly" discharge limitation means the highest allowable average of "daily discharge" over a calendar month, calculated as the sum of all "daily discharge" measured during a calendar month divided by the number of "daily discharge" measured during that month.
- G. "Average weekly" discharge limitation means the highest allowable average of "daily discharge" over a calendar week, calculated as the sum of all "daily discharge" measured during a calendar week divided by the number of "daily discharge" measured during that week.
- H. "Maximum daily" discharge limitation means the highest allowable "daily discharge".
- I. "Maximum any time (instantaneous maximum)" means the level not to be exceeded at any time in any grab sample.
- J. "Composite Sample" (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters each obtained at spaced time intervals during the compositing period. The composite must be "flow-proportional", which means either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite.

"Composite Sample for GC/MS volatile organic analysis" consists of at least four aliquots or grab samples collected during the sampling event and need not be flow proportioned. The samples are analyzed individually and the result is expressed as an average of the individual samples.

PART A

- K. "Grab Sample" means an individual sample of at least 100 milliliters collected at a randomly selected time over a period not to exceed 15 minutes.
- L. "i-s" means immersion stabilization - in which a calibrated device is immersed in the wastewater until the reading is stabilized.
- M. The "Daily Average" temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.
- N. "Measured Flow" means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.
- O. "At outfall XXX" means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line XXX, or where otherwise specified.
- P. "Estimate" means to be based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.
- Q. "Noncontact cooling water" means water used to reduce temperature which does not come in direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.
- R. "Toxic Pollutant" means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.
- S. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.
- T. "Publicly Owned Treatment Works (POTW)" means a facility [as defined by Section 212 of the Clean Water Act] which is owned by a State or Municipality, [as defined by Section 502(4) of the Clean Water Act], including any sewers that convey wastewater to such a treatment works, but not including pipes, sewers or other conveyances not connected to a facility providing treatment. The term also means the municipality [as defined in Section 502(4) of the Clean Water Act] which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.
- U. "Industrial User" means an establishment which discharges or introduces industrial wastes into a Publicly Owned Treatment Works (POTW).
- V. "Total Dissolved Solids" means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.
- W. "Storm water associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas as defined at 40 CFR Part 122.26(b)(14).
- X. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

PART A

- Y. "Best Management Practices (BMPs)" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States". BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

III. SELF-MONITORING, REPORTING, AND RECORDS KEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Records Retention

Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least five years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for three years from the date of the sample measurement, report, or application. The three-year period shall be extended as requested by the Department or the EPA Regional Administrator.

3. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling or measurements.
- b. The person(s) who performed the sampling or measurements.
- c. The date(s) the analyses were performed.
- d. The person(s) who performed the analyses.
- e. The analytical techniques or methods used; and the associated detection level.
- f. The results of such analyses.

4. Test Procedures

Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those contained in 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in the permit.

PART A

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

- a. Permittee or its designated laboratory shall participate in the periodic scheduled quality assurance inspections conducted by the Department and Environmental Protection Agency.
- b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136.

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit.
2. Unless instructed otherwise in PART C of this permit, a properly completed Discharge Monitoring Report (DMR) must be submitted to the following address within 28 days after the end of each monthly report period:

Department of Environmental Protection
Water Management Program
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110-8200

3. The completed DMR Form shall be signed and certified either by the following applicable person, as defined in 40 CFR Part 122.22(a), or by that person's duly authorized representative, as defined in 40 CFR Part 122.22(b):

- For a corporation - by a responsible corporate officer.
- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principle executive officer or ranking elected official.

If signed by other than the above, written notification of delegation of DMR signatory authority must be submitted to the Department.

4. If the permittee monitors any pollutant, using analytical methods described in PART A III.A.4 herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR.

PART A

C. Reporting Requirements

1. Planned Changes - The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b).
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to either the effluent limitations in the permit, or the toxic substance notification requirements of PART A III.D herein.
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Twenty-Four Hour Reporting

- a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- b. The following shall be included as information which must be reported within 24 hours under this paragraph:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (2) Any upset which exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.
- c. The Department may waive the written report on a case-by-case basis for reports under paragraph C.3.a of this section if the oral report has been received within 24 hours.

PART A

4. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.3 of this section, at the time Discharge Monitoring Reports are submitted. The reports shall contain the information listed in paragraph C.3 of this section.

5. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

D. Specific Toxic Substance Notification Levels (for Manufacturing, Commercial, Mining, and Silvicultural Dischargers) - The permittee shall notify the Department as soon as it knows or has reason to believe the following:

1. That any activity has occurred, or will occur, which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge on a routine or frequent basis will exceed the highest of the following "notification levels".
 - a. One hundred micrograms per liter.
 - b. Two hundred micrograms per liter for acrolein and acrylonitrile.
 - c. Five hundred micrograms per liter for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol.
 - d. One milligram per liter for antimony.
 - e. Five times the maximum concentration value reported for that pollutant in the permit application.
 - f. Any other notification level established by the Department.
2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter.
 - b. One milligram per liter for antimony.
 - c. Ten times the maximum concentration value reported for that pollutant in the permit application.
 - d. Any other notification level established by the Department.

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.
2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline.

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code, Chapter 92.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
3. In the absence of a Departmental action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions.

C. Duty to Provide Information

1. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
2. The permittee shall furnish to the Department, upon request, copies of records required to be kept by this permit.
3. Where the permittee is a Publicly Owned Treatment Works (POTW), the permittee shall provide the following information in the POTW's annual Wasteload Management Report, required under the provisions of 25 Pa. Code, Chapter 94.
 - a. Any new introduction of pollutants into the POTW from an Industrial User which would be subject to Sections 301 and 306 of the Clean Water Act if it were otherwise discharging directly into waters of the United States.

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- b. Any substantial change in the volume or character of pollutants being introduced into the POTW by an Industrial User which was discharging into the POTW at the time of issuance of this permit.
- c. Any interference, pass through, upsets, or permit violations which may be attributed to an Industrial User and actions taken to alleviate such events.
- d. The identity of Significant Industrial Users served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the character and volume of pollutants discharged into the POTW by the Significant Industrial User.

D. Facilities Operation

The permittee shall at all times maintain in good working order and properly operate and maintain all facilities and systems which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems which are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit.

The permittee shall develop, install, and maintain Best Management Practices to control or abate the discharge of pollutants when the practices are reasonably necessary to achieve the effluent limitations and standards in this permit or to carry out the purposes and intent of the Clean Water Act, or when required to do so by the Department.

E. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Bypassing

- 1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be violated, but only if the bypass is essential for maintenance to assure efficient operation. This type of bypassing is not subject to the reporting and notification requirements of PART A III.C.
- 2. Other Bypassing - In all other situations, bypassing is prohibited unless all of the following conditions are met:
 - a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage".

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b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed (in the exercise of reasonable engineering judgment) to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.

c. The permittee submitted the necessary reports required under PART A III.C.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative, and/or criminal penalties as set forth in 40 CFR Part 122.41(a)(2).

Any person or municipality who violates any provision of this permit; any rule, regulation, or order of the Department; or any condition or limitation of any permit issued pursuant to The Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603, and 605 of The Clean Streams Law.

B. Falsifying Information

The Clean Water Act provides that any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance),

shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 40 CFR Part 122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603, or 605 of The Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under the Clean Water Act and The Clean Streams Law.

PART B

D. Enforcement Proceedings

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

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and 25 Pa. Code, Chapter 92, the permittee shall allow the head of the Department, the EPA Regional Administrator, and/or their authorized representatives, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. To have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date in paragraph 2.b of this section;
 - b. The notice includes the appropriate Department transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. If the Department does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b of this section.

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3. In the event the Department does not approve transfer of the permit, the new owner or controller must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

D. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

PART C

I. OTHER REQUIREMENTS

- A. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- B. Polychlorinated Biphenol Compounds - There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- C. Total Residual Chlorine for once through cooling water (Outfall 001) is limited by the maximum concentration BAT Effluent Limitation of 0.20 mg/l. Total Residual Chlorine may not be discharged from any single generating unit for more than four hours per day in the summer month (June 1 through September 30) and two hours per day in the winter months (October 1 through May 31) unless it is demonstrated to the permitting authority that more time is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted [40 CFR Part 423.13(b)(1) and 423.13(b)(2)].

- D. Radioactive Reference - Waterborne releases of radioactive material to unrestricted areas shall conform to criteria set forth in Title 10 Code of Federal Regulations, Part 50, Appendix I - Numerical Guides for Design Objectives and Limiting Conditions for Operation to meet the Criterion as 'Low as is reasonably achievable' for radioactive material in Light-Water-Cooled Nuclear Reactor Effluents, as implemented through the Environmental Technical Specifications for the facility.

The facility operator shall maintain the following information at the Peach Bottom Atomic Power Station:

1. Report(s) specifying the quantities of radioactive materials released to unrestricted areas in liquid/gaseous effluents;
 2. Report(s) of the results of environmental surveillance activities, and
 3. Other reports as necessary for the estimation of the dose consequential to facility operation.
- E. Disinfection - The permittee shall provide for effective disinfection of this discharge to control disease-producing organisms during the swimming season (May 1 through September 30) to achieve a fecal coliform concentration not greater than 200/100 ml as geometric average, and not greater than 1,000/100 ml in more than 10% of the samples tested. During the period of October 1 through April 30 the fecal coliform concentration shall not exceed 100,000/100 ml as a geometric average.
- F. In the event of a joint occurrence of low river flows (<3,000 cfs) and high ambient water temperatures (>85 degrees F), the station will take appropriate measures to ascertain the potential effects on the local fish community. The Department will be notified when such conditions occur. Measures to be taken by the station will be communicated and discussed with the Department at that time. The station will ensure that two cooling towers are available in the event it is determined that the probability of an adverse impact occurring is high. If cooling towers are required, tower startup will be initiated as per station operating procedures.
- G. Boron - Approximately 830 gallons of dilute Sodium Pentaborate solution (10-55 gallon drums) is released into the discharge channel over a two-hour period every four to five months. Since this is a scheduled discharge, Boron shall be monitored at 001 on a daily basis during the discharge and a week before and after the discharge. In addition, a report of the quantity and concentration of Sodium Pentaborate discharged shall be maintained at the Peach Bottom Atomic Power Station. This information shall be made available for the Department's review at any time.

PART C

II. REQUIREMENTS APPLICABLE TO STORM WATER OUTFALLS

A. Prohibition of Nonstorm Water Discharges

1. Except as provided in A.2, all storm water outfalls shall be composed entirely of storm water.
2. The following nonstorm water discharges may be authorized, provided the nonstorm water component of the discharge is in compliance with C.2.b: discharges from fire fighting activities; fire hydrant flushings, potable water sources including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Spills

This permit does not authorize the discharge of any toxic or hazardous substances or oil resulting from an on-site spill.

C. Preparedness, Prevention and Contingency Plans

1. Development of Plan

Operators of facilities shall have developed a Preparedness, Prevention and Contingency (PPC) Plan in accordance with 25 Pa. Code § 91.34 and the "Guidelines for the Development and Implementation of Environmental Emergency Response Plans". The PPC Plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the PPC Plan shall describe the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility ensuring compliance with the terms and conditions of this permit.

2. Nonstorm Water Discharges

- a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of nonstorm water discharges. The certification shall include the identification of potential significant sources of nonstorm water at the site, a description of the results of any test and/or evaluation for the presence of nonstorm water discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the Department within 180 days of the effective date of this permit.

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- b. Except for flows from fire fighting activities, sources of nonstorm water listed in A.2. (authorized nonstorm water discharges) that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the nonstorm water component(s) of the discharge.

3. Special Requirements for SARA Title III, Section 313 Facilities

- a. Facilities subject to SARA Title III, Section 313 shall include in the PPC Plan a description of releases to land or water of Section 313 water priority chemicals that have occurred within the last three years. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor storage activities, outdoor manufacturing or processing activities, significant dust or particulate generating process, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants.
- b. Engineering Certification. No storm water PPC Plan for facilities subject to SARA Title III, Section 313 requirements for chemicals which are classified as "Section 313 water priority chemicals" shall be effective unless it has been reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the PPC Plan every year thereafter. This certification may be combined with the required annual certification in C.4. By means of these certifications, the engineer, having examined the facility and being familiar with the provisions of this part, shall attest that the storm water PPC Plan has been prepared in accordance with good engineering practices. Such certification shall in no way relieve the owner or operator of a facility covered by the PPC Plan of the duty to prepare and fully implement such Plan.

4. Comprehensive Site Compliance Evaluations and Record Keeping

Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:

- a. Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC plan, and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 90 days after the inspection.

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D. Storm Water Sampling and Reporting

1. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inches) storm event.
2. Grab samples shall be collected during the first 30 minutes of the discharge.
3. Composite samples shall be either flow- or time-weighted. One of the following methods may be used:
 - a. Minimum of one to four grab samples must be taken, depending upon the duration of the discharge. One grab must be taken in the first hour (or less) of discharge, with one additional grab (up to a minimum of four) taken in each succeeding hour of discharge for discharges lasting four or more hours. Composite the samples and run one analysis. For example:

<u>Discharge Duration</u>	<u>Number of Grab Samples</u>	<u>Minimum Number of Storm Water Analyses</u>
0 to 1 hour	1	1
1 to 2 hours	2	1
2 to 3 hours	3	1
3 to 4 hours	4	1
4 to 5 hours	4 (but 5 can be taken)	1
5 to 6 hours	4 (but 6 can be taken)	1

b. Automatic continuous sampling

4. Storm water monitoring results shall be summarized on a Discharge Monitoring Report (DMR) form and the Department's "Additional Information for the Reporting of Storm Water Monitoring" form.
5. When a facility has two or more outfalls that may reasonably be believed to discharge substantially identical effluents, based on a consideration of features and activities within the area drained by the outfall, the permittee may sample one such outfall and report that the quantitative data also applies to the substantially identical outfalls.
6. The following table describes the outfall locations and drainage areas:

<u>Outfall No.</u>	<u>Acreage</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Area Description</u>
003	10	39°45'45"	76°16'09"	Protected area around the power plant

PART C

III. CONTROLLING CHEMICAL ADDITIVES USAGE RATES

A. Chemical additives to control corrosion, scaling, algae, slime, fouling, oxygen, etc., and blow down discharge rates shall be managed by the permittee to ensure that toxic effects in the receiving stream are prevented. Usage rates shall be limited to the minimum amount necessary to accomplish the intended purposes of chemical addition and approval is limited to chemicals and usage rates contained in the application.

B. The additives currently approved are the following:

Name	Name
Aluminum Sulfate	PECO3
AZ 8104	Permatreat 191
Betz Clam-Trol CT-1	Sodium Chloride
Betz Clam-Trol CT-2	Sodium Hypochlorite
Betz Corrshield NT4203	Sodium Hydroxide
Betz Dearborn Klaraid CDP1346P	Sodium Metabisulfate
Betz Polyfloc AE1115P	Sodium Sulfite
Betz Powerline 43039	Spectrus NX1100
Disodium Phosphate	Spectrus NX1105
Hydrochloric Acid	Synguard 540S
Hydrogen Peroxide	Trisodium Phosphate
Monosodium Phosphate	
Nalco Ultrion 8157	

C. Whenever a change in additives or increase in usage rates is desired by the permittee, a written notification in the format specified by the Department, shall be submitted at least 60 days prior to the proposed use of the chemical. For each proposed chemical or usage rate, the written notification, as a minimum, shall include the following:

1. Trade names of additive.
2. Name and address of additive manufacturer.
3. Material Safety Data Sheet (MSDS) or other available information on mammalian or aquatic toxicological effects.
4. Bioassay data including the 96-hour LC50 on the whole product.
5. Proposed average and maximum additive usage rates in lbs/day.
6. A flow diagram showing the point of chemical addition and the affected outfalls.
7. The expected concentration of the product at the final outfall.
8. The product density for liquids (lbs/gal) used to convert usage rate (gpd) to in-system concentrations (mg/l).

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9. The analytical test method that could be used to verify final discharge concentrations when the product is in use and the associated minimum analytical detection level (mg/l).
 10. Conditioned water discharge rate (blowdown rate) and duration (hours).
 11. Available data on the degradation of or decomposition of the additive in the aquatic environment.
 12. Any other data or information the permittee believes would be helpful to the Department in completing its review.
- D. Use of products or chemicals that contain one or more ingredients that are carcinogens is generally prohibited. Before proposing limited use of such products or chemicals, the permittee must first thoroughly investigate use of alternate products or chemicals to avoid the use of the carcinogens. If no suitable alternatives are available, the permittee must submit written documentation as part of the information required above, that demonstrates to the satisfaction of the Department that no suitable alternatives are available and that any carcinogen in the proposed chemical or product will not be detectable in the final effluent using the most sensitive analytical method available.
- E. Accurate records of usage (name of additive, quantity added, date added) of any approved chemical additive and of blow down discharge volumes must be maintained on the "Chemical Additive Reporting Form" and kept on-site by the permittee. All correspondence and notifications related to the chemical additives usage rates must also be kept on-site with the required daily chemical usage records. If the notification is incomplete or the Department notifies the permittee that the proposed usage rate will cause violations of water quality standards, then use of the requested chemical additive or requested change in its usage rate will be denied.
- F. Based on the information presented, the Department will determine within 60 days whether the existing NPDES permit must be amended to include specific effluent limitations for active ingredients or other control measures. When so required, the permittee will be advised within 60 days that a formal request for a permit amendment is required including a filing fee and Act 14 notices.
- If a permit amendment application is not requested within 60 days, the permittee may proceed with the use of the proposed chemical additive or usage rate.