



PECO ENERGY

PECO Energy Company
Nuclear Group Headquarters
965 Chesterbrook Boulevard
Wayne, PA 19087-5691

January 4, 1995

Docket Nos. 50-352
50-353

License Nos. NPF-39
NPF-85

NPDES Permit No. PA0051926

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

Subject: Limerick Generating Station, Units 1 and 2
Renewal of National Pollutant Discharge Elimination System Permit

Gentlemen:

This letter is being submitted in accordance with the Limerick Generating Station (LGS), Units 1 and 2, Environmental Protection Plan (EPP) Section 3.2, which stipulates that the NRC shall be notified within 30 days following the date of a change or renewal to the National Pollutant Discharge Elimination System (NPDES) permit.

By letter dated December 12, 1994, the Pennsylvania Department of Environmental Resources (PA DER) renewed NPDES Permit No. PA0051926 authorizing PECO Energy Company to discharge effluents from its LGS facility to the Schuylkill River and Possum Hollow Run. The renewed NPDES permit became effective on January 1, 1995, and was issued for a period of five (5) years. A copy of the PA DER letter and renewed NPDES permit is enclosed.

In addition, this letter also provides notification, as required by Section 3.2 of the EPP, that a change previously requested under the provisions of the superseded permit has been approved and incorporated in the renewed NPDES permit for LGS, Units 1 and 2. Specifically, by letter dated February 15, 1994, we requested that the NPDES permit be revised to permit the use of a chemical additive (i.e. R.J.D. Products, Inc. Formula #65 Foaming Agent) to facilitate condenser tube leakage testing at LGS, Units 1 and 2. The NRC was notified of this request to use this chemical additive at the same time the permitting agency was notified as required by Section 3.2 of the EPP.

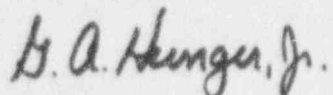
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January 4, 1995
Page 2

If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,



G. A. Hunger, Jr.
Director - Licensing

Enclosure

cc: T. T. Martin, Administrator, Region I, USNRC (w/ enclosure)
N. S. Perry, USNRC Senior Resident Inspector, LGS, (w/ enclosure)



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428

DEC 12 1994

RECEIVED
DEC 14 1994
"M" "L"

Southeast Regional Office

(610) 832-6130
FAX: (610) 832-6259

George M. Morley
Director, Environmental Affairs
PECO Energy Company
2301 Market Street
P.O. Box 8699
Philadelphia, PA 19101-8699

Re: Industrial Waste NPDES Permit
PA 0051926
Limerick Generating Station
Limerick Township
Montgomery County

Dear Mr. Morley:

Referenced permit is enclosed.

It will be necessary for you to submit a completed Discharge Monitoring Report (DMR) on a monthly basis to the appropriate agencies (see p. 5 of the NPDES permit).

A master copy of the DMR form is enclosed which should be reproduced for your use in this regard.

Please study the permit carefully and direct any questions to the Permits Section of this office.

Please take the time to complete the enclosed questionnaire and return it in the pre-addressed and stamped envelope. Your response will be taken into



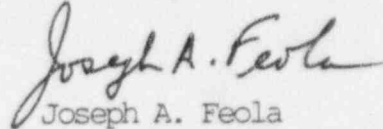
George M. Morley

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account as we consider ways of improving our service to the public and regulated community. Thank you for your cooperation.

Sincerely,



Joseph A. Feola
Water Management Program Manager

Enclosures: Permit
Master Discharge Monitoring Report
General Permit PAG-3
Supplemental Discharge Monitoring Data Reporting Form - Chemical
Additives
Information On Chemical Additives Form
Worksheet for the Determination of Net Total Suspended Solids.

cc: Environmental Protection Agency (Transmittal letter only)
DRBC
Limerick Township (Transmittal letter only)
Permits & Compliance
Operations Section
Ms. Wade
Re 30 (RN)1

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 001; LOCATED AT LATITUDE 40°13'13", LONGITUDE 75°35'22", WHICH RECEIVES WASTE FROM: cooling towers blowdown, spray pond overflow, treated radwaste and laundry drain collection system, holding pond, filter backwash and treated sewage.
- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
FLOW (MGD)						1/Week	Measured	
TOTAL SUSPENDED SOLIDS ***			30	60	75	1/Week	24 Hour Comp	
TEMPERATURE			See Other Requirement No. 5		110°F	1/Week	i-s	
TOTAL RESIDUAL OXIDANTS **				0.2	0.5	1/Week	Grab	
ZINC, TOTAL			0.7	1.0	1.75	1/Week	24 Hour Comp	
COPPER, TOTAL ****			0.14	0.28	0.35	1/Week	24 Hour Comp	
PHOSPHORUS AS P			Monitor/ Report	Monitor/ Report		1/Week	24 Hour Comp	

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

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

* Unless otherwise indicated, these are gross discharge limitations.

** See Other Requirements No. 8, 9, and 10.

*** These are net effluent limitations for total suspended solids. The limits will be effective July 1, 1995. The parameter shall be sampled and results must be reported from issuance to June 30, 1995. See worksheet to calculate net limitations.

**** These limits are effective October 1, 1995. Until such time monitor and report.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 001; LOCATED AT LATITUDE 40°13'13", LONGITUDE 75°35'22", WHICH RECEIVES WASTE FROM: cooling towers blowdown, spray pond overflow, treated radwaste and laundry drain collection system, holding pond, filter backwash and treated sewage.
- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
BETZ 3625 **			0.2	0.4	0.5	1/Week	Grab	
CLAM TROL CT-1 **			0.2	0.4	0.5	1/Week	Grab	
HYDROTHOL 191 ***			0.07	0.14	0.175	1/Month	Grab	
pH	Within Limits of 6.0 to 9.0 Standard Units at all times					1/Week	Grab	

There shall be no discharge of floating solids or visible foam in other than trace amounts. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outfall 001.

* Unless otherwise indicated, these are gross discharge limitations.

** See Other Requirement No. 14.

*** See Other Requirement No. 13.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR MONITORING POINT 101;
WHICH RECEIVES WASTE FROM: Sewage Treatment Plant

- A. The permittee is authorized to discharge during the period from issuance through expiration.
B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
FLOW						1/Week	Measured	
CBOD ₅			25		50	1/Week	8 Hour Comp	
TOTAL SUSPENDED SOLIDS			30		60	1/Week	8 Hour Comp	
FECAL COLIFORM		See Other Requirement No. 1				1/Week	Grab	
pH	Within Limits of 6.0 to 9.0 Standard Units at all times					1/Week	Grab	

There shall be no discharge of floating solids or visible foam in other than trace amounts.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Effluent of Sewage Treatment Plant.

*Unless otherwise indicated, these are gross discharge limitations.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR MONITORING POINT 201;
WHICH RECEIVES WASTE FROM: Holding pond containing non hazardous/industrial wastes generated as part of routine plant operations, testing, and maintenance.
- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
FLOW						1/Week	Measured	
TOTAL SUSPENDED SOLIDS			30	100		1/Week	Grab	
OIL & GREASE			15	20	30	1/Week	Grab	

There shall be no discharge of floating solids or visible foam in other than trace amounts.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Effluent from Holding Pond.

*Unless otherwise indicated, these are gross discharge limitations.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR MONITORING POINT 301;
WHICH RECEIVES WASTE FROM: Radwaste treatment plant and laundrydrain collection system
- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
FLOW (GPD)						1/Week	Measured	
TOTAL SUSPENDED SOLIDS			30	100		**	Grab	
OIL & GREASE			15	20	30	**	Grab	

There shall be no discharge of floating solids or visible foam in other than trace amounts.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Effluent containing treated Radwastewater and treated laundry drain wastewater.

*Unless otherwise indicated, these are gross discharge limitations.

Also see Other Requirement No. 12 for discharge of Radioactive materials.

** During the period of discharge of Laundrydrain wastewater through Monitoring Point 301.

PART A

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES Listed Below:

<u>Outfalls</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Which Receives Waste From:</u>	<u>Discharges to:</u>
002	40°13'17"	75°35'15"	Area around STP and Service roads	Possum Hollow Run
* 003	40°13'17"	75°35'14"	Chillers, floor drains, area around turbine units 1 and 2 and reactors 1 and 2	Possum Hollow Run
004	40°13'18"	75°35'07"	Fuel Storage Area	Possum Hollow Run
* 005	40°13'19"	75°35'05"	Turbine 2 area, circulation water pump structure and parking lots	Possum Hollow Run
012	40°13'15"	75°35'23"	Schuylkill River pumphouse, service roads	Possum Hollow Run
022	40°13'12"	75°35'16"	Area around STP and service roads	Possum Hollow Run
* 023	40°13'11"	75°35'17"	Cooling Tower Emergency Overflow Vent	Possum Hollow Run

- A. The permittee is authorized to discharge during the period from issuance through expiration.
 B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

1. This discharge shall consist solely of storm water runoff.
2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. This discharge is subject to the terms and conditions of the General Permit for Discharges of Storm Water from Industrial Activities, PAG-3, as issued on November 7, 1992 which is attached and made part of this permit. Monitoring Requirements listed under Appendix J are applicable.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s) At any one Outfall of the above listed Outfalls. In addition during discharge of cooling tower blowdown through Outfalls 003, 005 and/or 022 a grab sample must be collected at the effected Outfall(s) and be analyzed for those pollutants listed on page 2 and 2a using the sample frequency and type as indicated on the DMR's of such Outfall(s). the results must be submitted to the Department monthly. (RN)10

PART A

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES Listed Below:

<u>Outfalls</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Which Receives Waste From:</u>	<u>Discharges to:</u>
006	40°13'26"	75°35'22"	Maintenance area, metal, shop, hardware	Schuylkill River
007	40°13'27"	75°35'22"	Health Physics Building, Offices, Hardware	Schuylkill River
008	40°13'28"	75°35'23"	Health Physics Building, Electrical Substation	Schuylkill River
009	40°13'29"	75°35'25"	Control Building, Instrumentation shop, Storage	Schuylkill River

- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:
1. This discharge shall consist solely of storm water runoff.
 2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
 3. This discharge is subject to the terms and conditions of the General Permit for Discharges of Storm Water from Industrial Activities, PAG-3, as issued on November 7, 1992 which is attached and made part of this permit. Monitoring Requirements listed under Appendix J are applicable.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Any one Outfall

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 010; LOCATED AT LATITUDE 40°13'15", LONGITUDE 75°35'22", WHICH RECEIVES WASTE FROM: Schuylkill River intake water from makeup header drain.
 - A. The permittee is authorized to discharge during the period from issuance through expiration.
 - B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

There shall be no discharge of floating solids or visible foam in other than trace amounts.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Not monitored
This discharge shall consist solely of Schuylkill River water from the makeup water header drain.

(RN)17

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 011; LOCATED AT LATITUDE 40°13'15", LONGITUDE 75°35'23", WHICH RECEIVES WASTE FROM: Intake screen backwash, Schuylkill River Pumphouse pipe leakage, pump cooling water and air compressor's condensate.
 - A. The permittee is authorized to discharge during the period from issuance through expiration.
 - B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

There shall be no discharge of floating solids or visible foam in other than trace amounts.
Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Not Monitored

Debris collected on the intake trash racks shall not be returned to the Schuylkill River.

PART A

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES Listed Below:

<u>Outfalls</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Which Receives Waste From:</u>	<u>Discharges to:</u>
013	40°13'19"	75°35'05"	Service roads and Parking lots	Possum Hollow Run
014	40°13'26"	75°34'59"	Service roads and Parking lots	Possum Hollow Run
015	40°13'27"	75°34'59"	Service roads and Parking lots	Possum Hollow Run
016	40°13'28"	75°34'51"	Service roads and Parking lots	Possum Hollow Run
017	40°13'29"	75°34'52"	Service roads and Parking lots	Possum Hollow Run
018	40°13'30"	75°34'53"	Service roads and Parking lots	Possum Hollow Run
019	40°13'34"	75°34'46"	Service roads and Parking lots	Possum Hollow Run

- A. The permittee is authorized to discharge during the period from issuance through expiration.
- B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:
1. This discharge shall consist solely of storm water runoff.
 2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): None

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 020; LOCATED AT LATITUDE 40°13'29", LONGITUDE 75°34'50", WHICH RECEIVES WASTE FROM: Perkioinen Creek Makeup Storage Tank

- A. The permittee is authorized to discharge during the period from issuance through expiration.
 B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS			
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C	
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM				
FLOW						Monthly	Calculated		
TOTAL SUSPENDED SOLIDS			Monitor/ Report		Monitor/ Report	**	Grab		
TEMPERATURE					110°F	**	i-s		
pH		Within Limits of 6.0 to 9.0 Standard Units at all times					Monthly	Grab	

There shall be no discharge of floating solids or visible foam in other than trace amounts.
 Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 020

* Unless otherwise indicated, these are gross discharge limitations.

** Discharge of cooling tower blowdown through Outfall 020 shall be monitored at a frequency of once a week.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, FOR DISCHARGE 021; LOCATED AT LATITUDE 40°13'37", LONGITUDE 75°35'25", WHICH RECEIVES WASTE FROM: Cooling towers drift loss, cooling towers' screens wash, and stormwater from acid/chlorination storage area

- A. The permittee is authorized to discharge during the period from issuance through expiration.
B. Based on production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE PARAMETERS	DISCHARGE LIMITATIONS*					MONITORING REQUIREMENTS		
	MASS UNITS (lbs/day)		CONCENTRATIONS (mg/l)			** MEASUREMENT FREQUENCY	SAMPLE TYPE	24 HOUR REPORT UNDER A.3.C
	AVERAGE MONTHLY	MAXIMUM DAILY	AVERAGE MONTHLY	MAXIMUM DAILY	INSTAN- TANEOUS MAXIMUM			
FLOW						Monthly	Estimated	
TOTAL SUSPENDED SOLIDS			Monitor/ Report		Monitor/ Report	Monthly	Grab	
pH		Within Limits of 6.0 to 9.0 Standard Units at all times				Monthly	Grab	
TOTAL KJELDAHL NITROGEN			Monitor/ Report		Monitor/ Report	Monthly	Grab	
TOTAL PHOSPHOROUS			Monitor/ Report		Monitor/ Report	Monthly	Grab	
IRON, DISSOLVED			Monitor/ Report		Monitor/ Report	Monthly	Grab	
TOTAL RESIDUAL CHLORINE			Monitor/ Report		Monitor/ Report	Monthly	Grab	

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 021

*Unless otherwise indicated, these are gross discharge limitations.

Debris collected on the screens shall not be discharged to the Outfall 021.

** Measurement frequency must be increased to at least twice a month during an event of startup/leakage in the system causing high volume of discharge through Outfall 021.

2. Definitions

- a. The term "Bypass" means the intentional diversion of wastes from any portion of a treatment facility.
- b. The term "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. The "average monthly" mass discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the average monthly mass discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
- d. The "maximum daily" mass discharge means the total discharge by weight during any calendar day.
- e. The "average monthly" concentration means the arithmetic average of all the daily determinations of concentration made during a calendar month.
- f. The "daily determination of concentration" means either the concentration of a composite sample taken during a calendar day or the arithmetic average of all grab samples taken during a calendar day.
- g. The "maximum daily" concentration means the daily determination of concentration for any calendar day.
- h. The "instantaneous maximum" concentration means the concentration not to be exceeded at any time in any grab sample.
- i. The term "Composite Sample" means a combination of individual samples obtained at regular intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite. The maximum time period between individual samples shall not exceed two hours, except that for wastes of a uniform nature the samples may be collected on a frequency of at least twice per working shift and shall be equally-spaced over a 24-hour period (or over the operating day if flows are of a shorter duration).
- j. The term "Grab Sample" means an individual sample collected in less than 15 minutes.

- k. The term "i-s" means immersion stabilization - in which a calibrated device is immersed in the effluent stream until the reading is stabilized.
- l. The "average monthly" temperature means the arithmetic mean of temperature measurement made on an hourly basis, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month or during the operating month if flows are of a shorter duration.
- m. The "maximum daily" temperature means the highest arithmetic mean of the hourly temperatures observed for any two (2) consecutive hours during a 24-hour day, or during the operating day if flows are of a shorter duration.
- n. The term "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. The term "At outfall XXX" means a sampling location in outfall line XXX downstream from the last point at which wastes are added to outfall line XXX, or otherwise specified.
- p. The term "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. The term "non-contact cooling water" shall mean water which is used in a cooling system designed so as to maintain constant separation of the cooling medium from: all contact with process chemicals but which may on occasion, as a result of corrosion, cooling system leakage or similar cooling system failures contain small amounts of process chemicals: provided, that all reasonable measures have been taken to prevent, reduce, eliminate and control to the maximum extent feasible such contamination: and provided further, that all reasonable measures have been taken that will mitigate the effects of such contamination once it has occurred.

3. SELF-MONITORING, REPORTING, AND RECORDS KEEPING

a. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

b. Reporting of Monitoring Results

- (1) Monitoring results obtained during each month shall be summarized for that month and reported on a Discharge Monitoring Report (DMR) Form postmarked no later than the 23rd day of the following month. Duplicate signed copies of these and all other reports required herein, shall be submitted to:

Regional Water Quality Manager
Dept. of Environmental Resources
Lee Park, Suite 6010
555 North Lane
Conschocken, PA 19428

- (2) If the permittee monitors any pollutant, using analytical methods described in A.3.e. below, 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.

c. Non-Compliance Reporting

- (1) 24-Hour Reporting - The permittee shall orally report to the Department within 24-hours of becoming aware of the following:
 - (a) Actual or anticipated non-compliance with any term or condition of this permit which may endanger health or the environment.
 - (b) Actual or anticipated non-compliance with any "maximum daily" discharge limitation which is identified in Part A.1 of this permit as being either:
 - (i) A toxic pollutant effluent standard established by EPA pursuant to Section 307(a) of the Clean Water Act,
 - (ii) For a toxic or hazardous pollutant which, if not adequately treated, could constitute a threat to human health, welfare, or the environment, or

- (iii) Any pollutant identified as the method to control a toxic pollutant or hazardous substance (i.e. indicator pollutant).
 - (c) Any unanticipated bypass which exceeds any effluent limitations in the permit.
 - (d) Where the permittee orally reports this information within the above mentioned 24-hour time period, a written submission outlining the above information must be submitted to the Department within 5-days of becoming aware of such a condition, unless this requirement is waived by the Department upon receipt of the oral report.
- (2) Other Non-Compliance Reporting
- (a) The permittee shall give advance notice to the Department of any planned changes to the permitted activity or facility which may result in non-compliance with permit requirements.
 - (b) Where the permittee knows in advance of the need for a by-pass which will exceed effluent limitations, it shall submit prior notice to the Department at least 10 days, if possible, before the date of the bypass.
 - (c) The permittee shall report all instances of non-compliance which are not reported above at the time of DMR submission.
- (3) The reports and notifications required above shall contain the following information:
- (a) A description of the discharge and cause of non-compliance;
 - (b) The period of non-compliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and
 - (c) Steps being taken to reduce, eliminate, and prevent recurrence of the non-complying discharge.
- d. Specific Toxic Substance Notification Levels - 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 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 (5) times the maximum concentration value reported for that pollutant in the permit application
 - (f) Any other notification level established by the Department
- (2) That it has begun, or expects to begin, to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

e. 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 alternate test procedures approved pursuant to that part.

f. Recording of Results

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

- (1) The exact place, date, and time of sampling or measurements;
- (2) The person(s) who performed the sampling or measurements;
- (3) The dates the analyses were performed;
- (4) The person(s) who performed the analyses;
- (5) The analytical techniques or methods used; and
- (6) The results of such analyses.

g. Records Retention

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 (3) years. The three year period shall be extended as requested by the Department or the EPA Regional Administrator.

4. SCHEDULE OF COMPLIANCE

- a. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

- b. Periodic Reports Required

No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to the Department a written notice of compliance or non-compliance with the specific schedule requirement. In the case of non-compliance, the notice shall include the cause of non-compliance, any remedial actions taken, the estimated date when compliance with the elapsed date shall occur, and the probability of meeting the next scheduled requirement.

1. MANAGEMENT REQUIREMENTS

a. Permit Modification, Termination, or Revocation and Reissuance

- (1) This permit may be modified, terminated, or revoked and reissued during its term for any of the causes specified in 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 non-compliance, does not stay any permit condition.
- (3) Toxic Pollutants

Notwithstanding the above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, then this permit shall be modified or revoked and reissued by the Department to conform with the toxic effluent standard or prohibition and the permittee so notified.

In the absence of a Departmental action to modify or to revoke and reissue this permit, any toxic effluent standard or prohibition established under Section 307(a) of the Act is considered to be effective and enforceable against the permittee.

b. 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) 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 Department, it shall promptly submit such facts or information to the Department.
- (4) The permittee shall give advance notice to the Department of any planned physical alterations or additions to the permitted facility.

c. Facilities Operation

The permittee shall at all times maintain in good working order and properly operate all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee for water pollution control and abatement to achieve compliance with the terms and conditions of the permit. Proper operation and maintenance includes but is not limited to effective performance based on designed-facility removals, adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and processing controls including appropriate quality assurance procedures. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with this permit.

d. Adverse Impact

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from non-compliance with this permit.

e. Bypassing

- (1) Bypassing not Exceeding Permit Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if the bypass is for essential maintenance to assure efficient operation. This type of bypassing is not subject to the reporting and notification requirements of Part A.3.c above.
- (2) Other Bypassing - In all other situations bypassing is prohibited unless the following conditions are met:
 - (a) A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage";
 - (b) There are no feasible alternatives to a bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down-time. (This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
 - (c) The permittee submitted the necessary reports required under Part A.3.c above.
- (3) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above.

f. Reduction, Loss, or Failure of the Treatment Facilities

Upon reduction, loss, or failure of the treatment facilities, in order to maintain compliance with its permit, the permittee shall control production and all discharges until either the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

g. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from adversely affecting the environment.

2. 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 an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- (2) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; to inspect any collection, treatment, pollution management, or discharge facilities required under the permit; and to sample any substances or parameters at any location.

b. Transfer of Ownership or Control

- (1) No permit may be transferred unless approved by the Department.
- (2) In the event of any pending change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the Department by letter of such pending change at least 30 days prior to the change in ownership or control.

- (3) The letter shall be accompanied by the appropriate Department forms for transfer of the permit and a written agreement between the existing permittee and the new owner or controller stating that the existing permittee shall be liable for violations of the permit up to and until the date of permit transfer and that the new owner or controller shall be liable for permit violations from that date on.
- (4) After receipt of the documentation above, the Department shall notify the existing permittee and the new owner or controller of its decision concerning approval of the transfer. In approving a transfer the Department may modify or revoke and reissue the permit.
- (5) In the event the Department does not approve transfer of the permit, the new owner or controller must submit a new permit application.

c. Confidentiality of Reports

Except for data determined to be confidential under 25 Pa. Code, Chapter 92 all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the EPA Regional Administrator. Effluent data shall not be considered confidential.

d. Penalties and Liability

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

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

e. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges; nor does it authorize any injury to private property or any invasion of personal rights.

f. Other Laws

Nothing herein contained shall be construed to be an intent on the part of the Department to approve any act made or to be made by the permittee inconsistent with the permittee's lawful powers or with existing laws of the Commonwealth regulating industrial wastes and the practice of professional engineering, nor shall this permit be construed to sanction any act otherwise forbidden by federal or state law or regulation, or by local ordinance. Nor does it pre-empt any duty to obtain state or local assent required by law for the discharge(s).

g. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART C

OTHER REQUIREMENTS (Continued)

1. Effective disinfection to control disease producing organisms shall be the production of an effluent which will contain a concentration not greater than 200/100 ml of fecal coliform organisms as a geometric average value, nor greater than 1000/100 ml of these organisms in more than 10% of the samples tested.
2. This permit authorizes the discharge of treated sewage until such time as facilities for conveyance and treatment at a more suitable location are installed and are capable of receiving and treating the permittee's sewage. Such facilities must be in accordance with either the applicable municipal official plan adopted pursuant to Section 5 of the Pennsylvania Sewage Facilities Act, the Act of January 24, 1956, P.L. 1535, as amended, or a comprehensive Water Quality Management Plan as set forth in Section 91.31 of the Rules and Regulations of the Department. When such municipal sewerage facilities become available, the permittee shall provide for the conveyance of the sewage to these sewerage facilities, abandon the use of the sewage treatment plant thereby terminating the discharge authorized by this permit, and notify the Department accordingly. This permit shall then, upon notice from the Department, terminate and become null and void, and shall be relinquished to the Department.
3. If at anytime the Department determines that the discharge permitted herein creates a public nuisance or causes environmental harm to the receiving water of the Commonwealth, the Department may require the Permittee to adopt such remedial measures as will produce a satisfactory effluent. If the Permittee fails to adopt such remedial measures within the time specified by the Department, the right to discharge herein granted shall, upon notice by the Department, cease and become null and void.
4. There shall not be any discharge of polychlorinated biphenyl (PCB) compounds such as those commonly used for transformer fluid.
5. The following requirements apply with respect to the thermal impact of the discharge from Outfall 001 upon the Schuylkill River.

The discharge shall not cause a rise of stream temperature when the ambient stream temperature is 87°F or above; nor cause more than a 5°F rise above ambient temperature until stream temperature reaches 87°F; nor cause a change of stream temperature by more than 2°F during any one-hour period except within an assigned heat dissipation area consisting of one-half the stream width and 3000 feet downstream of the discharge point 001 to the river.

The permittee shall monitor the temperature of water withdrawn from the Schuylkill River and the temperature of the effluent discharged at Outfall 001 at least once per week and shall report the results on the Monthly Discharge Monitoring Report (DMR) for Outfall 001.

6. The additives and usage rate currently approved are the following:

PART C

OTHER REQUIREMENTS (Continued)

Name	Usage Rate (lbs/day)	
	Average Monthly	Maximum Daily
PEC-3	400	800
PEC-10	Average effluent limit for Zinc at 001 must be limited to 0.7 mg/l	
PEC-12	2700	5400
Sodium Bromide 40	1900	1990
Betz DTS	4760	9520
ClamTrol CT-1	Average effluent limit of whole product as 0.2 mg/l	
FoamTrol 144A	450	900
Betz-3625	Average effluent limit of whole product as 0.2 mg/l	
Betz-860	23,000	46,000
Hydrothol 191	Average effluent limit of the product as 0.07 mg/l	
RJD Product Formula No. 65	306	306
PEC-04	4320	4320
PEC-05	4496	4496
Bromide Plus	1888	1888

Usage rates shall be consistent with the quantities and rates approved by the Department and shall be limited to the minimum amount necessary to accomplish the intended purposes of chemical addition.

Accurate usage records (name of additive, quantity added, date added) of any approved chemical additive and blowdown discharge volumes must be maintained on the Chemical Additive Reporting Form and kept on site by the permittee. To the maximum extent possible, sampling and laboratory analytical procedures for these chemicals are to conform with the "Sampling and Analytical Testing Instructions for Industrial Discharges" routinely used for completion of NPDES permit applications.

7. Chemical additives to control corrosion, scaling, algae, slime, fouling or oxygen, etc., and blowdown discharge rates shall be managed by the permittee to ensure that toxic effects in the receiving stream are prevented. These also include substances/compounds added to the wastewater such as polymers, water softeners, flocculents, coagulants, emulsion breakers, dispersants and oxygen scavengers.

Usage rates shall be consistent with the quantities and rates approved by the Department and shall be limited to the minimum amount necessary to accomplish the intended purposes of chemical addition.

PART C

OTHER REQUIREMENTS (Continued)

Accurate usage records (name of additive, quantity added, date added) of any approved chemical additive and blowdown discharge volumes must be maintained on the Chemical Additive Reporting Form and kept on site by the permittee. To the maximum extent possible, sampling and laboratory analytical procedures for these chemicals are to conform with the "Sampling and Analytical Testing Instructions for Industrial Discharges" routinely used for completion of NPDES permit applications.

Whenever a change in chemical additive or increase in usage rates is desired by the permittee, a written notification shall be submitted to the Department at least sixty (60) days prior to the proposed use of the chemical. All required data must be provided on the form for each new or changed chemical additive or proposed change in the usage rate.

As a minimum, the following information must be provided on the whole product (if data on the whole product is not available, monitoring data for all active ingredients in the product shall be provided):

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 (lb/gal) used to convert usage rate (gpd) to in-system concentrations (mg/l).
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.

PART C

OTHER REQUIREMENTS (Continued)

Based on the information presented, the Department will decide whether specific effluent limitations for one or more active ingredients or other control requirements are necessary. Where necessary, the Department may establish permit limits, require other controls or deny use of these chemicals. If the information is complete, use of the proposed chemical additive or usage rate will be considered approved 60 days after the date of notification to the Department. If the notification is incomplete or the Department notifies the permittee that the proposed usage rate will cause violations of water quality standards, the permittee will be advised that a permit amendment is required and would likely be denied. All such letters and notifications must be kept on site with the required daily chemical usage data.

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 thoroughly investigate the use of alternative products or chemicals to avoid the use of the carcinogens. If no 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. Based on the information presented, the Department will decide whether specific effluent limitations or other control requirements are necessary for the chemicals, and where necessary, establish permit limits, require other controls or deny use of these chemicals.

8. The term Maximum Daily Concentration as it relates to total residual oxidants (TRO) discharge means the average analysis made over a single period of TRO release which does not exceed two hours.
9. The term total residual oxidants for water with bromides generated through the use of a chemical additive is defined as the value obtained using the amperometric method for total residual chlorine described in 40 CFR §136. This method is described in Standard Methods as the "amperometric titration method".
10. For Outfall 001, total residual oxidants may not be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge total residual oxidants at any one time unless the permittee can demonstrate to the Department that the units in a particular location cannot operate at or below this level of oxidants.

PART C

OTHER REQUIREMENTS (Continued)

11. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with 25 Pa. Code, Chapters 271, 273, 275, 283, and 285 (relating to permits and requirements for landfilling, land application, incineration, and storage of sewage sludge), Federal Regulation 40 CFR 257, and the Federal Clean Water Act and its amendments.
12. Water borne 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 provide the Department with copies of reports specifying the quantities of radioactive material released to unrestricted areas in liquid/gaseous effluents.

The facility operator shall provide the Department with copies of reports of the results of environmental surveillance activities and other such reports as necessary for the estimation of the dose consequential to facility operation.

The above reports are to be forwarded to the following agency:

Pennsylvania Department of
Environmental Resources
Bureau of Radiation Protection
P.O. Box 2063
Harrisburg, PA 17120

13. Spray pond blowdown shall be sampled and analyzed for the active ingredients of Hydrothol 191 during the use of the product in the spray pond, and during the time the discharge from the spray pond may contain this product. The Gas Chromatograph method shall be used for the analysis of the active ingredient. The results obtained shall be used to calculate the concentration of the whole product Hydrothol 191 at the Outfall 001. The calculations demonstrating compliance of the whole product with the effluent limitations (0.07 mg/l) contained in Part A of the permit shall be maintained at the site and the results must be reported on the DMRs.
14. Outfall 001 shall be sampled and analyzed for Betz 3625 and Betz Clam-Trol CT-1 on a weekly basis, with daily record keeping of the usage rates during use of the product. Spectrophotometer/colorimeter method shall be used for Betz 3625 with a detection level of 0.052 mg/l. Methyl Orange Method shall be used for Betz Clam-Trol CT-1 with a detection level of 0.2 mg/l.

INSTRUCTIONS FOR UTILIZING
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT

The original DMR form(s) included with your permit are provided to serve as a master. Copies of this form must be used when reporting the results of the monitoring requirements in your permit. Do not write on or send the original master. If you receive computer generated preprinted DMR forms they should be used in place of the enclosed forms.

A "Monitor Only" or "Report" contained in a permit requirement block indicates that the parameter is monitored and the test result reported in the appropriate block. Any test methods specified in Part C of the permit must be used.

An "Average Weekly" value is defined as the highest weekly average value observed during the monthly monitoring period.

For parameters for which the effluent limit is lower than the Method Detection Limit (MDL) of the most sensitive existing EPA approved (40 CFR Part 136) test method or DER approved method, the parameters should be analyzed using the test method specified in Part C of the permit. The sample results must be specified on the DMR form as either the measured (quantified) value or as "less than" the detection limit used in the test (eg. < x.x). Results SHALL NOT be reported as "Not Detectable" or ND. For computing monthly averages, all "less than" sample results may be counted as zero values. All sample results used in computing monthly average values must be reported on the DMR form in the DMR comment section.

Loading or mass units shall be reported as the average of the calculated daily loadings during the monthly (or weekly) measurement period.

You should also note any other special instructions or definitions contained on the front and back of the DMR as well as page 3 and 4 of the permit.

Submit the completed forms to the State, EPA and County Health Department as required in the permit.

To Calculate Mass of Pollutants For a Sampling Event

Use the sampling event reported concentration and perform the appropriate calculation as follows:

$$\text{_____ concentration } (\mu\text{g/l}) \times 0.00834 \times \text{_____ flow (million gallons/day)} = \text{_____ lb/day}$$

or

$$\text{_____ concentration (mg/l)} \times 8.34 \times \text{_____ flow (million gallons/day)} = \text{_____ lb/day}$$

The value assigned to "flow (million gallons/day)" should be the 24-hour average flow for the outfall on the day the sample was taken. Where an outfall discharges for only part of a day (x hours), the daily mass value should be determined by using the x-hour average flow.

To Calculate an Arithmetic Average or Mean

Use the following equation:

$$\frac{X_1 + X_2 + X_3 + X_4 + \dots + X_n}{n}$$

where n = number of results

X = value of each analytical result

For example,

five samples were analyzed, their results were 75, 82, 90, 70, 85.

$$\frac{75 + 82 + 90 + 70 + 85}{5} = 80.4$$

To Calculate a Geometric Mean or Geometric Average (For Fecal Coliform Only)

Use the following equation:

$$\sqrt[n]{X_1 \times X_2 \times X_3 \times X_4 \times \dots \times X_n}$$

where n = number of analysis results

X = value of each analytical result

Note: If any value of X is zero, substitute a 1.0 for the calculation.

For example,

five samples were analyzed, their results were 75, 82, 90, 70, 85.

$$\sqrt[5]{75 \times 82 \times 90 \times 70 \times 85} = \sqrt[5]{3,293,325,000} = 80.1$$

To Calculate Average of Values Expressed as "Less than Numbers"

When averaging a series of values which are all expressed as "less than" values, add those numbers and divide by the number of values. Report it as "less than" that average number.

For example, the results are <10, <50 and <25.

Calculate the average as $(10 + 50 + 25) \div 3 = <28.3$.

When the series of values to be averaged is a mixture of real numbers and "less than" numbers, add all the numbers and divide by the number of values. The method of reporting the results will depend on the relative frequency of occurrence of "less than" numbers, and the relative difference in magnitude of the sample results. **For example:**

The average of <10, <25, 40

would be reported as <25

The average of <10, 40, 70

would be reported as 40

The average of <10, <10, 100

would be reported as 40

PERMITTEE NAME/ADDRESS (Include Facility Name and Location if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

PA 0051926
 PERMIT NUMBER

001
 DISCHARGE NUMBER

Form Approved.
 OMB No. 2040-0004
 Approval expires 10-31-94

MONITORING PERIOD					
FROM			TO		
YEAR	MO	DAY	YEAR	MO	DAY

(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

NOTE: Read instructions before completing this form.

PARAMETER (12-17)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (3 Card Only)			QUALITY OR CONCENTRATION (4 Card Only)				NO. EX (62-67)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE MONTHLY	MAXIMUM DAILY	UNITS	MINIMUM	AVERAGE MONTHLY	MAXIMUM DAILY	UNITS			
FLOW	PERMIT REQUIREMENT	MONITOR REPORT	MONITOR REPORT	MGD						1/WK	MEAS.
TOTAL SUSPENDED SOLIDS *	PERMIT REQUIREMENT					30	60	MG/L		1/WK	24HC
(Effluent) TEMPERATURE	PERMIT REQUIREMENT						110	°F		1/WK	I-S
TOTAL RESIDUAL OXIDANTS	PERMIT REQUIREMENT						0.2	MG/L		1/WK	GRAB
ZINC, TOTAL	PERMIT REQUIREMENT					0.7	1.0	MG/L		1/WK	24 HC
COPPER, TOTAL **	PERMIT REQUIREMENT					0.14	0.28	MG/L		1/WK	24 HC

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

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

** These limits are effective October 1, 1995. Until such time monitor and report.

* These are net limits effective July 1, 1995. Sample and report analysis results.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101

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

PA 0051926
 PERMIT NUMBER

001
 DISCHARGE NUMBER

Form Approved.
 OMB No. 2040-0004
 Approval expires 10-31-94

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

MONITORING PERIOD						
FROM			TO			
YEAR	MO	DAY	YEAR	MO	DAY	

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	INST.		AVERAGE	MAXIMUM			
					MINIMUM	MONTHLY	DAILY	UNITS			
TEMPERATURE INTAKE WATER	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
HYDROTHOL 191	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						0.07	0.14	MG/L		1/MO
BETZ - 3625	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						0.2	0.4	MG/L		1/WK
CLAMTROL CT-1	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						0.2	0.4	MG/L		1/WK
pH	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					6.0		Inst. Max. 9.0	STD		1/WK
PHOSPHOROUS AS P	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT						MONITOR/REPORT	MONITOR/REPORT	MG/L		1/WK
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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

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

PERMITTEE NAME/ADDRESS (Include Facility Name and location, if different)
 NAME PECU Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101
 FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

PA 0051926 (2-16) 101 (17-19)
 PERMIT NUMBER DISCHARGE NUMBER

Form Approved.
 OMB No. 2040-0004
 Approval expires 10-31-94

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (3 Card Only) AVERAGE (54-61)			QUALITY OR CONCENTRATION (4 Card Only) INST. AVERAGE INST. (62-67)				NO. EX (68-71)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		MONTHLY	DAILY	UNITS	MINIMUM	MONTHLY	MAXIMUM	UNITS			
FLOW	PERMIT REQUIREMENT	MONITOR REPORT	MONITOR REPORT	CPD						1/WK	MEAS.
CBOD ₅	PERMIT REQUIREMENT					25		MG/L		1/WK	8HC
SUSPENDED SOLIDS	PERMIT REQUIREMENT					30		MG/L		1/WK	8HC
FECAL COLIFORM	PERMIT REQUIREMENT					200		#/100ml		1/WK	GRAB
pH	PERMIT REQUIREMENT				6.0		9.0	STD		1/WK	GRAB
	PERMIT REQUIREMENT										
	PERMIT REQUIREMENT										

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

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

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101

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

PA 0051926 201
 PERMIT NUMBER DISCHARGE NUMBER

Form Approved.
 OMB No. 2040-0004
 Approval expires 10-31-94

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT / PERMIT REQUIREMENT	(3 Card Only) QUANTITY OR LOADING			(4 Card Only) QUALITY OR CONCENTRATION				NO. EX (67-68)	FREQUENCY OF ANALYSIS (64-65)	SAMPLE TYPE (69-70)
		AVERAGE MONTHLY	MAXIMUM DAILY	UNITS	MINIMUM	AVERAGE MONTHLY	MAXIMUM DAILY	UNITS			
FLOW		MONITOR REPORT	MONITOR REPORT	GPD						1/WK	MEAS.
TOTAL SUSPENDED SOLIDS						30	100	MG/L		1/WK	GRAB
OIL AND GREASE						15	20	MG/L		1/WK	GRAB

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

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

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

NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101

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

PA 0051926 PERMIT NUMBER
 301 DISCHARGE NUMBER

* During the period provided for approval of this discharge permit, the discharge of wastewater to the Philadelphia Sewerage Authority is approved. Approval expires 10-31-94.

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (3 Card Only)			QUALITY OR CONCENTRATION (4 Card Only)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE MONTHLY (38-39)	MAXIMUM DAILY (40-41)	UNITS (42-43)	MINIMUM (44-45)	AVERAGE MONTHLY (46-47)	MAXIMUM DAILY (48-49)			
FLOW	PERMIT REQUIREMENT	MONITOR REPORT	MONITOR REPORT	GPD					1/WK	MEAS.
TOTAL SUSPENDED SOLIDS	PERMIT REQUIREMENT				30	100	MG/L	*		GRAB
OIL AND GREASE	PERMIT REQUIREMENT				15	20	MG/L	*		GRAB
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

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

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

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

ADDRESS 2301 Market Street
 Philadelphia, PA 19101

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

PA 0051926 PERMIT NUMBER
 003 DISCHARGE NUMBER

This form must be used during discharge of cooling tower blowdown through 003. * Sample during discharge 10-31-94

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING			(4 Card Only) QUALITY OR CONCENTRATION			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
		MONTHLY	DAILY		MONTHLY	DAILY				
FLOW	PERMIT REQUIREMENT	MONITOR/REPORT	MONITOR/REPORT	MGD				*	MEAS.	
TOTAL SUSPENDED SOLIDS	PERMIT REQUIREMENT						MG/L	*	GRAB	
TEMPERATURE	PERMIT REQUIREMENT						110 °F	*	I-S	
TOTAL RESIDUAL OXIDANTS	PERMIT REQUIREMENT						0.2 MG/L	*	GRAB	
ZINC, TOTAL	PERMIT REQUIREMENT						0.7 1.0 MG/L	*	GRAB	
COPPER, TOTAL **	PERMIT REQUIREMENT						0.14 0.28 MG/L	*	GRAB	
PHOSPHORUS AS P	PERMIT REQUIREMENT						MONITOR/REPORT MONITOR/REPORT MG/L	*	GRAB	

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 TYPED OR PRINTED

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

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 AREA CODE NUMBER YEAR MO DAY

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

** These limits are effective October 1, 1995. Until such time monitor and report.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101
 FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery County

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16) (17-19)

PA 0051926
 PERMIT NUMBER

003
 DISCHARGE NUMBER

This form must be used during discharge of cooling tower blowdown through 003. * Sample during discharge.
 Form Approved OMB No. 2040-0004
 Approval expires 10-31-94

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53) (54-61)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
HYDROTHOL 191	SAMPLE MEASUREMENT					MONTHLY	DAILY			
	PERMIT REQUIREMENT					0.07	0.14	MG/L	1/MO	GRAB
BETZ-3625	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT					0.2	0.4	MG/L	1/WK	GRAB
CLAMTROL CT-1	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT					0.2	0.4	MG/L	1/WK	GRAB
PH	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT				INST. MIN 6.0		INST. MAX. 9.0	STD	1/WK	GRAB
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TYPED OR PRINTED	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 23 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE		DATE		
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO

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

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

ADDRESS 2301 Market Street
Philadelphia, PA 19101

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

PA 0051926
 PERMIT NUMBER

005
 DISCHARGE NUMBER

This form must be used during discharge of cooling tower blowdown through 005. * Sample during discharge.
 Form Approved OMB No. 2040-0001
 Approval expires 10-31-94

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (3 Card Only)			UNITS	QUALITY OR CONCENTRATION (4 Card Only)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE MONTHLY (40-53)	MAXIMUM DAILY (54-61)			MINIMUM (38-45)	AVERAGE MONTHLY (46-53)	MAXIMUM DAILY (54-61)			
FLOW	PERMIT REQUIREMENT	MONITOR/REPORT	MONITOR/REPORT		MGD						
TOTAL SUSPENDED SOLIDS	SAMPLE MEASUREMENT					MONITOR/REPORT	MONITOR/REPORT	MG/L	*		MEAS.
	PERMIT REQUIREMENT										
TEMPERATURE	SAMPLE MEASUREMENT							110 °F	*		I-S
	PERMIT REQUIREMENT										
TOTAL RESIDUAL OXIDANTS	SAMPLE MEASUREMENT							0.2 MG/L	*		GRAB
	PERMIT REQUIREMENT										
ZINC, TOTAL	SAMPLE MEASUREMENT					0.7	1.0	MG/L	*		GRAB
	PERMIT REQUIREMENT										
COPPER, TOTAL **	SAMPLE MEASUREMENT					0.14	0.28	MG/L	*		GRAB
	PERMIT REQUIREMENT										
PHOSPHORUS AS P	SAMPLE MEASUREMENT								*		GRAB
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 TYPED OR PRINTED

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

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE NUMBER
 DATE YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 ** These limits are effective October 1, 1995. Until such time monitor and report.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101
 FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery County

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

PA 0051926
 PERMIT NUMBER

005
 DISCHARGE NUMBER

This form must be used during discharge of cooling tower blowdown through 005. * Sample during discharge
 Form Approved OMB No. 2048-0044
 Approved by EPA-10-31-94

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE MONTHLY	MAXIMUM DAILY	UNITS			
HYDROTHOL 191	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.07	0.14	MG/L		1/MO	GRAB
BETZ-3625	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.2	0.4	MG/L		1/WK	GRAB
CLAMTROL CT-1	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.2	0.4	MG/L		1/WK	GRAB
PH	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT				INST. MIN 6.0		INST. MAX. 9.0	STD		1/WK	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 3 years.)	TELEPHONE		DATE		
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO
TYPED OR PRINTED						

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

PERMITTEE NAME/ADDRESS (Include Facility Name if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street
Philadelphia, PA 19101
 FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery County

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

PA 0051926 (2-16)
 PERMIT NUMBER
 021 (17-19)
 DISCHARGE NUMBER

Measurement frequency must be increased to at least twice during high flow.
 Form Approved OMB No. 2000-004
 Approval expires 10-31-94

MONITORING PERIOD

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT / PERMIT REQUIREMENT	(3 Card Only) QUANTITY OR LOADING			(4 Card Only) QUALITY OR CONCENTRATION			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)	
		AVERAGE MONTHLY	MAXIMUM DAILY	UNITS	MINIMUM	AVERAGE MONTHLY	MAXIMUM				UNITS
		INST.	INST.	INST.	INST.	INST.	INST.				
FLOW		MONITOR REPORT	MONITOR REPORT	GPD					MONTHLY	EST.	
TOTAL SUSPENDED SOLIDS						MONITOR REPORT		MG/L	MONTHLY	GRAB	
pH					6.0		9.0	STD	MONTHLY	GRAB	
TOTAL KJELDAHL NITROGEN						MONITOR REPORT		MG/L	MONTHLY	GRAB	
TOTAL PHOSPHORUS						MONITOR REPORT		MG/L	MONTHLY	GRAB	
IRON, DISSOLVED						MONITOR REPORT		MG/L	MONTHLY	GRAB	
TOTAL RESIDUAL CHLORINE						MONITOR REPORT		MG/L	MONTHLY	GRAB	

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

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

PERMITTEE NAME/ADDRESS (include

Facility Name/Location if different)

NAME PECO Energy Company

ADDRESS 2301 Market Street

Philadelphia, PA 19101

FACILITY Limerick Generating Station

LOCATION Limerick Township, Montgomery County

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

PA 0051926

PERMIT NUMBER

023

DISCHARGE NUMBER

This form must be approved during discharge of cooling towers at Limerick Township through 023 * Sample during Air changes 10-31-94

MONITORING PERIOD

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) (46-53) QUANTITY OR LOADING (54-61)			(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE MONTHLY	MAXIMUM DAILY			
HYDROTHOL 191	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT					0.07	0.14	MG/L	1/MO	GRAB
GETZ-3625	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT					0.2	0.4	MG/L	1/WK	GRAB
CLAMTROL CT-1	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT					0.2	0.4	MG/L	1/WK	GRAB
PH	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT					INST. MIN 6.0	INST. MAX. 9.0	STD	1/WK	GRAB
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

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

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

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
 NAME PECO Energy Company
 ADDRESS 2301 Market Street Philadelphia, PA 19101
 FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery Co.

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

PA 0051926 (2-16)
 PERMIT NUMBER

023 (17-19)
 DISCHARGE NUMBER

MONITORING PERIOD

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

This form must be used during discharge of cooling tower blowdown through 023.
 * Sample during discharge
 Form Approved OMB No. 2040-0064
 Approval expires 10-31-94

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (3 Card Only)			QUALITY OR CONCENTRATION (4 Card Only)				NO. EX (62-67)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE MONTHLY	MAXIMUM DAILY	UNITS	MINIMUM	AVERAGE MONTHLY	MAXIMUM DAILY	UNITS			
FLOW	PERMIT REQUIREMENT	MONITOR/REPORT	MONITOR/REPORT	MGD						*	MEAS.
TOTAL SUSPENDED SOLIDS	PERMIT REQUIREMENT					MONITOR/REPORT	MONITOR/REPORT	MG/L		*	GRAB
TEMPERATURE	PERMIT REQUIREMENT						110	°F		*	I-S
TOTAL RESIDUAL OXIDANTS	PERMIT REQUIREMENT						0.2	MG/L		*	GRAB
ZINC, TOTAL	PERMIT REQUIREMENT					0.7	1.0	MG/L		*	GRAB
COPPER, TOTAL **	PERMIT REQUIREMENT					0.14	0.28	MG/L		*	GRAB
PHOSPHORUS AS P	PERMIT REQUIREMENT					MONITOR/REPORT	MONITOR/REPORT	MG/L		*	GRAB

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

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 ** These limits are effective October 1, 1995. Until such time monitor and report.

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

NAME PECO ENERGY COMPANY

ADDRESS 2301 Market Street
Philadelphia, PA 19101

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

(2-16)
PA 0051926
PERMIT NUMBER

(17-19)
002,003,004,005,012,022 and 023
DISCHARGE NUMBER
Revised 3/91

Form Approved
OMB No. 2040-0004
Approval expires 6-30-88

FACILITY Limerick Generating Station
LOCATION Limerick Township, Montgomery

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

APPENDIX J:

Additional Facilities

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (54-61)			QUALITY OR CONCENTRATION (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE (46-53)	MAXIMUM	UNITS	MINIMUM (38-45)	AVERAGE (Composites) (46-53)	MAXIMUM (Grab) (54-61)			
C-Biochemical Oxygen Demand (5-day)	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Chemical Oxygen Demand	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Oil and Grease	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB
pH	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	SU	1/Year	1 GRAB
Total Suspended Solids	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Total Phosphorous	SAMPLE MEASUREMENT	XXX	XXX	XXX	XXX					
	PERMIT REQUIREMENT	XXX	XXX		XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN. AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC 1001 AND 33 USC 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)						TELEPHONE	DATE		
TYPED OR PRINTED							SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR

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

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

NAME PECO ENERGY COMPANY
 ADDRESS 2301 Market Street
Philadelphia, PA 19101

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

(2-16) PA0051926 PERMIT NUMBER
 (17-19) 006,007,008,009 DISCHARGE NUMBER

Form Approved
 OMB No. 2040-0004
 Approval expires 6-30-88

Revised 3/91

APPENDIX J:

Additional Facilities

FACILITY Limerick Generating Station
 LOCATION Limerick Township, Montgomery.

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

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3-Card Only) (46-53) QUANTITY OR LOADING (54-61)			(4-Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE (Composites)	MAXIMUM (Grab)			
C-Biochemical Oxygen Demand (5-day)	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Chemical Oxygen Demand	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Oil and Grease	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB
pH	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	SU	1/Year	1 GRAB
Total Suspended Solids	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
Total Phosphorous	SAMPLE MEASUREMENT	XXX	XXX		XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Annual Avg.	Report Daily Max.	MG/L	1/Year	1 GRAB 1 COMP.
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN. AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC 1001 AND 33 USC 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)						TELEPHONE		DATE	
TYPED OR PRINTED							SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER

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

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

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

GENERAL PERMIT FOR DISCHARGES OF STORM WATER FROM
INDUSTRIAL ACTIVITIES
PAG-3

NPDES PERMIT NO: PA PA 0051926

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

INSERT FACILITY NAME AND ADDRESS BELOW

PECC Energy Company
2301 Market Street
Philadelphia, PA 19101

to discharge storm water to (NAME RECEIVING WATER(S) BELOW):

Schuylkill River and Possum Hollow Run

subject to the terms and criteria contained herein, for the discharge of storm water from point sources composed entirely of storm water associated, in whole or in part, with industrial activity, as defined in this General Permit, to surface waters of the Commonwealth, including to municipal separate storm sewers and non-municipal separate storm sewers. All monitoring and reporting requirements specified in Appendix J to this permit apply to this discharge.

This permit authorizes certain new and existing (those industrial activities discharging storm water as of October 1, 1992) discharges of storm water associated with industrial activity to receiving waters in accordance with effluent limitations, including the development and implementation of Best Management Practices (BMPs) monitoring requirements, and other conditions set forth in Parts A, B, and C hereof.

Storm water discharges associated with industrial activity from facilities which have an NPDES permit for a discharge other than storm water and that are not otherwise covered by an NPDES permit may be covered by this general permit until the NPDES permit for the non-storm water discharge has been reissued.

Discharges of storm water associated with an industrial activity must submit a Notice of Intent (NOI) in accordance with the requirements of this permit, using an NOI form provided by the Department (or photocopy thereof), to be authorized to discharge under this general permit.

Owners or operators of existing facilities (those facilities with storm water discharges associated with industrial activity as of October 1, 1992) which meet the eligibility requirements of this general permit and submit a timely administratively complete and acceptable NOI to the Department are authorized to discharge storm water associated with industrial activity to surface waters of the Commonwealth under the terms and conditions of this permit, unless notified by the Department that the discharge must cease. Newly proposed discharges of storm water associated with industrial activity which are eligible for coverage under this general permit must submit an administratively complete and acceptable NOI at least 30 days prior to planning commencement of the industrial activity which will have a storm water discharge. If, after the 30 days has expired, the Department has not notified the activity owner or operator seeking approval that the NOI, or any portion thereof, is disapproved, the activity may be commenced, provided all other applicable NPDES and Water Quality Management permits for the facility have been obtained.

The Department may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

NOTICE OF INTENT REQUIREMENTS

Deadlines for NOI Submittal

Existing discharges of storm water associated with an industrial activity which are eligible for coverage under the general permit must file either an administratively complete and acceptable NOI or the Department's simplified NPDES application as soon as possible after November 7, 1992 (if an administratively complete and acceptable NOI which meets the requirements of this general permit has not been submitted before this date). It should be noted that facilities with storm water discharges associated with an industrial activity operating after October 1, 1992 without

NPDES permit coverage are unlawful and may be subject to enforcement action and third party litigation exposure. Newly proposed discharges of storm water associated with an industrial activity which are eligible for coverage under this general permit must submit an administratively complete and acceptable NOI 30 days prior to commencing any discharge.

Contents of Notice of Intent. The Notice of Intent shall be signed in accordance with the signatory requirements of this permit and shall include the NOI information specified on the NOI Form and in the Instructions for completing the Form. The NOI Form and Instructions are attached to this general permit.

Where to Submit. Facilities which discharge storm water associated with industrial activity must use an NOI form provided by the Department (or photocopy thereof). NOIs must be signed in accordance with the signatory requirements of this permit. NOIs are to be submitted to the appropriate regional office of the Department.

The following storm water discharges associated with an industrial activity are not covered by this permit:

- a. Discharges which contain hazardous pollutants, toxics, or any other substance which - because of its quantity, concentration, or physical, chemical, or infectious characteristics - may cause or contribute to an increase in mortality or morbidity in either an individual or the total population, or pose a substantial present or future hazard to human health or the environment when discharged into navigable waters;
- b. Discharges which individually or cumulatively have the potential to cause significant adverse environmental impact;
- c. Discharges to waters classified as "Special Protection" under Chapter 93 of the Department's Rules and Regulations;
- d. Discharges which are not, or will not be in compliance with any of the terms or conditions of the general permit;
- e. Discharges from persons with a significant history of noncompliance with prior permits issued by the Department;
- f. Discharges which do not, or will not, result in compliance with applicable effluent limitations or water quality standards;
- g. Discharges from industrial activities which the Department determines require an individual NPDES permit to ensure

compliance with the Clean Water Act, the Clean Streams Law, and rules and regulations promulgated thereto; or where a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

h. Discharges associated with an industrial activity that are mixed with sources of non-storm water, other than non-storm water discharges that are:

(i) in compliance with a different NPDES permit; or

(ii) identified by and in compliance with Part C.1.a (authorized non-storm water discharges) of this permit.

i. Discharges associated with an industrial activity which are subject to an existing effluent limitation guideline addressing storm water (or a combination of storm water and process)¹;

j. Discharges associated with an industrial activity that are subject to an existing NPDES individual or general permit; are located at a facility where an NPDES permit has been terminated or denied; or which are issued a permit in accordance with paragraph B.2 (requirements for individual permits) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric effluent limitations for such discharges;

k. Discharges associated with an industrial activity from construction sites.

¹ For the purpose of this permit, the following effluent limitation guidelines address storm water (or a combination of storm water and process water): cement manufacturing (40 C.F.R. 411); feedlots (40 C.F.R. 412); fertilizer manufacturing (40 C.F.R. 418); petroleum refining (40 C.F.R. 419); phosphate manufacturing (40 C.F.R. 422); steam electric (40 C.F.R. 423); coal mining (40 C.F.R. 434); mineral mining and processing (40 C.F.R. 436); ore mining and dressing (40 C.F.R. 440); and asphalt emulsion (40 C.F.R. 443 Subpart A). This general permit may authorize storm water discharges associated with an industrial activity which are not subject to an effluent limitation guideline even where a different storm water discharge at the facility is subject to an effluent limitation guideline.

- l. Discharges associated with an industrial activity that would adversely affect a listed endangered or threatened species or its critical habitat; and
- m. Discharges associated with industrial activity from inactive mining, inactive landfills, or inactive oil and gas operations where an operator cannot be identified.

Owners or operators of storm water discharges associated with an industrial activity must submit a Notice of Intent (NOI) to the Department, in the format specified, to be covered under this general permit prior to commencing any discharge. The authority granted by this permit is subject to the following conditions:

1. The Department may require any person authorized by this permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Department to take action under this paragraph. The Department may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. The applicant shall submit the individual permit application within 90 days of receipt of notice. This notice shall include the following: (1) a brief statement of the reasons for this decision, (2) an application form, (3) a statement setting a deadline for the owner or operator to file the application, and (4) a statement that on the effective date of the individual NPDES permit, as it applies to the individual permittee, coverage under this general permit shall automatically terminate.

The Department may grant additional time to submit the application upon written request from the applicant. If an owner or operator fails to submit, in a timely manner, an individual NPDES permit application required by the Department under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

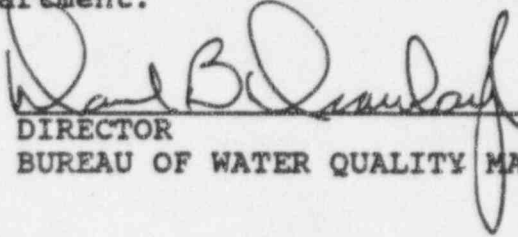
2. Any owner or operator authorized by this general permit may request to be excluded from the coverage of this general permit by applying for an individual permit. The owner or operator shall submit an individual application on approved Pennsylvania individual NPDES application forms, with reasons supporting the request, to the Department. The request shall be granted by issuance of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this general permit, the applicability of this general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit. When an individual NPDES permit is denied to an owner or operator otherwise subject to this general permit, the owner or operator can continue discharging if all eligibility requirements under the general permit are met. If the owner or operator does not meet the eligibility requirements of the general permit, or is otherwise prohibited from general permit coverage, coverage under the general permit is automatically terminated on the date of such denial, unless otherwise specified by the Department.
- 4.a. Approval of Coverage under the General Permit - Application for renewal of coverage under this general permit must be submitted to the Department at least 180 days prior to the expiration date indicated below (unless permission has been granted by the Department for submission at a later date). A request for renewal of coverage is to be made using the "Notice of Intent for Coverage Under the General Storm Water Permit for Discharges Associated with Industrial Activities." In the event that a timely and complete application for renewal of coverage has been submitted and the Department is unable, through no fault of the permittee, to reissue the approval for coverage before midnight November 6, 1997, the terms and conditions of the approval will be automatically continued and will remain fully effective and enforceable pending the issuance or denial of the renewal of coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the permit.
- b. Issuance or Reissuance of the General Permit - This general permit expires on midnight November 6, 1997. Persons with newly proposed discharges seeking coverage under this permit must submit an NOI to the Department 30 days prior to commencement of the activity resulting in the discharge but not later than August 6, 1997. Persons who submit a timely renewal application prior to August 6, 1997 may continue to discharge pursuant to the terms and conditions of the permit until the Department has reissued the permit, at which time the discharger must meet the terms and conditions of the newly issued permit or cease the discharge. The Department will publish a notice in the Pennsylvania Bulletin of the draft general permit, and after a comment period, notice of the final reissued general permit will be published in the Bulletin.

5. This permit may be modified or revoked and re-issued by the Department if monitoring data indicates one or more toxic pollutants are, or are expected to be, discharged by the permitted activity. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with an industrial activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual NPDES permit.
6. No condition of this permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations or local ordinances.

This general permit is issued November 7, 1992 and shall expire at midnight, November 6, 1997, unless reissued on or before this date by the Department.

PERMIT ISSUED

BY 
DIRECTOR
BUREAU OF WATER QUALITY MANAGEMENT

PART A

EFFLUENT LIMITATIONS, SELF-MONITORING AND REPORTING REQUIREMENTS

1. EFFLUENT LIMITATIONS

This permit establishes effluent limitations, in the form of implemented Best Management Practices (BMPs) such as Preparedness, Prevention, and Contingency (PPC) Plans and Erosion and Sedimentation Control (E & S) Plans which restrict the rates and quantities of pollutants discharged into surface waters of the Commonwealth.

All storm water discharges associated with industrial activities must comply with any applicable effluent limitations established in 25 Pa. Code Chapters 91-97, 101, 102, and 105.

In addition, coal pile runoff is subject to an additional specific numeric effluent limit of 50 mg/l for Total Suspended Solids (TSS), unless the coal pile is itself, or is on the site of, a "coal mining activity" as defined in 25 Pa. Code § 86.1, in which case the effluent limit which has been established pursuant to 25 Pa. Code Chapters 86-90 is applicable. Any discharge which contains coal pile runoff shall not exceed a maximum concentration at any time of 50 mg/l total suspended solids. Coal pile runoff shall not be diluted with storm water or other flows to meet these limitations. The pH of such discharges shall be within the range of 6.0 to 9.0 standard units. Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff which is associated with a 10-year, 24-hour rainfall event shall not be subject to the 50 mg/l total suspended solids limitation, unless other requirements are applicable. For existing discharges, failure to demonstrate compliance with these limitations as expeditiously as practicable, but in no case later than three years after the date of issuance of this permit, will constitute a violation of this permit. All new discharges of coal pile runoff must meet these limitations upon NOI approval.

Further, in addition to meeting other effluent limitations (including development and implementation of BMPs), discharges of storm water from hardwood lumber manufacturers and others who handle hardwood residue must develop and implement the BMPs specified in the manual titled "Using Best Management Practices To Prevent And Control Pollution From Hardwood Residue Storage Sites", unless otherwise directed by the Department.

For all storm water discharges associated with an industrial activity covered under this permit, a water quality based effluent limitation may be required under applicable state and federal law when necessary to ensure that the water quality standards of the receiving water are attained. Discharges of storm water associated with an industrial activity shall not result in a violation of the water quality criteria prescribed in 25 Pa. Code Chapters 16 and 93 for the various designated uses of the receiving stream.

2. MONITORING REQUIREMENTS

This permit establishes monitoring requirements for certain categories of industrial activities as set forth below. The Department reserves the right to enter onto land to conduct, or to require additional monitoring where necessary in appropriate circumstances, such as where a danger of water pollution is present, or water pollution is suspected to be occurring from an industrial activity subject to this general permit.

a. Limitations on Monitoring Requirements

(1) Except as required by paragraph A.2.b., only those facilities with activities specifically identified in Parts A.2.b (semi-annual monitoring requirements) and A.2.c (annual monitoring requirements) of this permit are required to conduct sampling of their storm water discharges. All facilities shall provide an annual certification in accordance with section C.3.c (Comprehensive Site Compliance Evaluations) of this permit and the federal storm water program implementation regulations set forth at 40 C.F.R. Part 122.

(2) The Department may provide written notice to any facility otherwise exempt from the sampling requirements of Parts A.2.b. (semi-annual monitoring requirements) or A.2.c. (annual monitoring requirements), that it shall conduct annual discharge sampling.

b. Semi-Annual Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in Parts A.2.b.(1) through (6) must monitor those storm water discharges identified below at least semi-annually (every six months) except as provided in A.2.g (sampling waiver) and A.2.e.(5) (sampling requirements). Permittees with facilities identified in Parts A.2.b.(1) through (6) (below) must report in accordance with Part A.3. (reporting and

recordkeeping) and summarize the data when applying for a permit renewal. Monitoring records must be made available to interested persons upon request.

(1) **Section 313 of SARA Title III Facilities.** In addition to any monitoring required by Parts A.2.b through f, facilities with storm water discharges associated with an industrial activity that are subject to requirements to report releases into the environment under Section 313 of SARA Title III, 42 U.S.C. §11023, for chemicals which are classified as Section 313 water priority chemicals are required to monitor storm water that is discharged from the facility that comes into contact with any equipment, tank, container or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car loading or unloading area where a Section 313 water priority chemical is handled for the parameters listed in Appendix A of this permit.

(2) **Primary Metal Industries.** Facilities with storm water discharges associated with industrial activity classified as Standard Industrial Classification (SIC) 33 (Primary Metal Industry) are required to monitor such storm water that is discharged from the facility for parameters listed in Appendix B of this permit.

(3) **Land Disposal Units/Incinerators/BIFs.** Facilities with storm water discharges associated with industrial activity from any active or inactive landfill, land application site or open dump without a stabilized final cover that has received any industrial wastes (other than wastes from a construction site); and incinerators (including Boilers and Industrial Furnaces (BIFs)) that burn hazardous waste and operate under interim status or a permit under Subtitle C of RCRA, are required to monitor storm water that is discharged from the facility for the parameters listed in Appendix C of this permit.

(4) **Wood Treatment.** Facilities with storm water discharges associated with industrial activity from areas that are used for wood treatment, wood surface application or storage of treated or surface protected wood at any wood preserving or wood surface facilities are required to monitor such storm water that is discharged from the facility for the parameters listed in Appendix D of this permit.

(5) **Coal Pile Runoff.** Facilities with storm water discharges associated with industrial activity from coal pile runoff are required to monitor such storm water that is discharged from the facility for the parameters listed in Appendix E of this permit.

(6) **Battery Reclaimers.** Facilities with storm water discharges associated with industrial activity from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation (including material handling activities) at facilities that reclaim lead acid batteries are required to monitor such storm water that is discharged from the facility for the parameters listed in Appendix F of this permit.

c. Annual Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date of this permit, permittees with facilities identified in Parts A.2.c.(1) through (3) (below) must monitor those storm water discharges identified below at least annually (1 time per year) except as provided in A.2.g. (sampling waiver), and A.2.e.(5) (sampling requirements). However, such permittees must retain monitoring results in accordance with Part A.3.f. (retention of records) and summarize the data when applying for permit renewal. Monitoring records shall be made available to interested persons upon request.

(1) **Airports.** At airports with over 50,000 flight operations per year, facilities with storm water discharges associated with industrial activity from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps, and dedicated aircraft deicing stations) are required to monitor such storm water that is discharged from the facility when deicing activities are occurring for the parameters listed in Appendix G of this permit.

(2) **Coal-Fired Steam Electric Facilities.** Facilities with storm water discharges associated with industrial activity from coal handling sites at coal fired steam electric power generating facilities (other than discharges in whole or in part from coal piles subject to storm water effluent guidelines at 40 C.F.R. 423 - which are not eligible for coverage under this permit) are required to monitor such storm water that is discharged from the facility for the parameters listed in Appendix H of this permit.

(3) **Animal Handling/Meat Packing.** Facilities with storm water discharges associated with industrial activity from animal handling areas, manure management (or storage) areas, and production waste management (or storage) areas that are exposed to precipitation at meat packing plants, poultry packing plants, and facilities that manufacture animal fats and oils, are required to monitor such storm water that is discharged from the facility for the parameters listed in Appendix I of this permit.

d. Annual Inspections

(1) **Additional Facilities.** Facilities identified in Parts A.2.d.(1)(i) through (vii) (below), and any other facilities not subject to Appendices A-I, with storm water discharges associated with industrial activity, may conduct annual inspections of the facility in lieu of monitoring for the parameters listed in Appendix J of this permit. Permittees with facilities identified in Part A.2.d who conduct monitoring are not required to submit monitoring results, unless required in writing by the Department. Facilities eligible for annual inspections in lieu of monitoring include those with stormwater discharges which:

(i) come in contact with storage piles for solid chemicals used as raw materials at facilities classified as SIC 30 (Rubber and Miscellaneous Plastics Products) or SIC 28 (Chemicals and Allied Products);

(ii) are from those areas at automobile yards and other automotive dismantlers and recyclers with any of the following: (A) over 250 auto/truck bodies with drivelines (engine, transmission, axles, and wheels), 250 drivelines, or any combination thereof (in whole or in parts) are exposed to storm water; (B) over 500 auto/truck units (bodies with or without drivelines in whole or in parts) are stored exposed to storm water; or (C) over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water;

(iii) come into contact with lime storage piles that are exposed to storm water at lime manufacturing facilities;

(iv) are from oil handling sites at oil fired steam electric power generating facilities;

(v) are from cement manufacturing facilities and cement kilns (other than discharges in whole or in part from material storage piles subject to storm water effluent guidelines at 40 C.F.R. 411 - which are not eligible for coverage under this permit);

(vi) are from ready-mixed concrete facilities; or

(vii) are from ship building and repairing facilities.

(2) Where an annual inspection is conducted in lieu of monitoring, it shall include an examination of sediment present in the outfalls associated with the facility subject to this permit, including identification of substances present in the sediment. Any deficiencies found during the annual inspection shall be corrected and the PPC Plan updated immediately. A complete documentation on the inspection and any follow up corrective measures shall be kept on site and submitted to the Department upon request.

e. Sampling Requirements

(1) 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 water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken. For all other discharges, data shall be reported for both a grab sample and a composite sample.

(2) 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 inch rainfall) storm event.

(3) Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge and the discharger shall submit on the Department form entitled, "Additional Information for the Reporting of Storm Water Discharge Monitoring," a description of why a grab sample during the first 30 minutes was impracticable.

(4) Composite samples shall be either flow or time-weighted. One of the following sampling methods shall be used:

(a) A combination of at least three grab samples taken in each hour for the first three hours of the discharge, with each sample being separated by a minimum period of 15 minutes; or

(b) Automatic continuous sampling.

(5) Samples taken in compliance with the monitoring requirements specified above shall be taken from the discharge at each outfall.

When a facility has two or more outfalls that, based on a consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g. low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided; and

(6) Grab samples must be collected and analyzed for the determination of pH, cyanide, and oil and grease.

f. Additional Information

For each outfall, the permittee shall submit the additional information requested in the attached Department form entitled, "Additional Information for the Reporting of Storm Water Discharge Monitoring." This additional information shall be submitted with the Discharge, Monitoring Report (DMR) (see A.3, below).

g. Sampling Waiver

When the discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.). This information shall be submitted on the attached Department form entitled, "Additional Information for the Reporting of Storm Water Discharge Monitoring." Dischargers are precluded from exercising this waiver more than once during a two-year period.

h. Toxicity Testing

The Department may require the Permittee to monitor for acute whole effluent toxicity in accordance with Department protocols. The Department will provide such protocols upon request.

3. REPORTING AND RECORDKEEPING

a. Failure to Certify

Any facility that is unable to provide the certification required under Part C.3.a.(3) (testing for non-storm discharges), must notify the Department within 180 days of the effective date of this general permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure for any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of stormwater discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to surface waters of the Commonwealth which are not

authorized by an NPDES permit or which are not exempt from the storm water permitting requirement are unlawful, and must be terminated or dischargers must submit appropriate NPDES permit application forms.

b. Reporting of Monitoring Results

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." (The original forms are provided in the Notice of Intent package for use as a master. Make copies of them and use the copies to file the required report.) A signed copy of the DMR Form and all other reports required herein, shall be submitted to the appropriate regional office of the Bureau of Water Quality Management.

Permittees shall report in accordance with the following:

(1) Permittees required to conduct sampling pursuant to Parts A.2.b.(1), A.2.b.(2), and A.2.b.(3) shall submit monitoring results on a semi-annual basis, postmarked no later than July 31st and January 31st of each year. The report shall contain results from the previous 6 months. A separate DMR form is required for each event monitored.

(2) Permittees required to conduct sampling pursuant to Parts A.2.b.(4), A.2.b.(5), and A.2.b.(6) shall submit monitoring results on a semi-annual basis, postmarked no later than April 30th, and October 31st of each year. The report shall contain results from the previous 6 months. A separate DMR form is required for each event monitored.

(3) Permittees with facilities identified in Part A.2.c., and those facilities in A.2.d. who conduct monitoring, are not required to submit monitoring results, unless required in writing by the Director, or when applying for permit renewal.

(4) In addition to filing copies of DMRs in accordance with A.3.b.(1)-(3), facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (serving a population of 100,000 or more) must submit signed copies of DMRs to the operator of the municipal separate storm sewer system in accordance with the dates required in accordance with A.3.b.(1)-(3).

c. Non-Compliance Reporting

(1) **Required Reporting.** The permittee shall report noncompliance to the Department in accordance with the following:

(a) 24-Hour Oral Reporting - the permittee shall give at least a 24-hour advanced notice to the Department of any planned changes to the permitted activity or facility that may result in non-compliance with permit requirements. The permittee shall also report non-compliance with any term or condition of this permit, and any statute, rule, or regulation, to the Department within 24 hours of becoming aware of the non-compliance.

(b) Follow-up Written Reporting - where the permittee orally reports the information in Part A.3.c within the previously mentioned 24-hour time period, a written submission outlining the reported information must be completed, kept on file, and submitted to the Department upon request.

(c) Non-compliance reporting pursuant to A.3.c.(1).(a)-(b) shall not excuse a person from immediate notification to the Department of incidents causing or threatening pollution pursuant to 25 Pa. Code §101.2(a).

(2) **Required Information.** The reports and notifications required in Part A.3.c(1) above shall contain the following information:

(a) A description of the discharge and cause of non-compliance;

(b) The period of non-compliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and

(c) Steps being taken to reduce, eliminate, and prevent recurrence of the non-complying discharge.

d. Test Procedures

Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit or have been approved by the Department in writing.

e. Recording of Results

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

- (1) The date, exact place, and time of sampling or measurements;
- (2) The duration (in hours) of the storm event(s) sampled;
- (3) Rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff;
- (4) The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch) rainfall storm event;
- (5) An estimate of the total volume (in gallons) of the discharge sampled;
- (6) The initials or name(s) of the individual(s) who performed the sampling or measurements;
- (7) The date(s) analyses were performed;
- (8) The time(s) analyses were initiated;
- (9) The initials or name(s) of the individual(s) who performed the analyses;
- (10) References and written procedures, when available, for the analytical techniques or methods used; and
- (11) The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

f. Retention of Records

(1) The permittee shall retain the PPC plan developed in accordance with Part C.3 (storm water PPC Plans) of this permit until at least one year after coverage under this permit terminates. The permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, until at least one year after coverage under this permit terminates. In addition, the permittee shall retain on site, at all times, a complete copy of the NOI, this permit, and any authorizations received from the Department pursuant to this permit, until at least one year after coverage under this permit terminates. This period may be explicitly modified by alternative provisions of this permit (see paragraph A.3.f.(2) of this permit) or extended by request of the Department at any time.

(2) For discharges subject to sampling requirements pursuant to Part A.2, in addition to the requirements of paragraph A.3.f(1) (above), permittees are required to retain for a six-year period from the date of sample collection or for the term of this permit, whichever is greater, records of all monitoring information collected during the term of this permit. Permittees must submit such monitoring results to the Director upon the request of the Director, and submit a summary of such result as part of permit renewal requirements in accordance with Condition 4 of this permit.

PART B

STANDARD CONDITIONS

1. MANAGEMENT REQUIREMENTS

a. Permit Modification, Termination, or Revocation and Reissuance

(1) This permit may be modified, suspended, revoked and reissued, or terminated during its term for any of the causes specified in 25 Pa. Code Chapter 92.

The Department may modify, revoke, suspend, or terminate previously issued coverage under this general NPDES permit, and require the storm water discharger to apply for and obtain an individual NPDES permit in accordance with 25 Pa. Code Section 92.83.

(2) The filing of a request by the permittee for a permit or coverage modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any permit condition.

(3) Toxic Pollutants.

(a) Notwithstanding the above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act (33 U.S.C. §1317(a)) for a toxic pollutant that is present in the discharge, and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, then this permit shall be modified or revoked and reissued by the Department to conform with the toxic effluent standard or prohibition and the permittee so notified.

(b) In the absence of a Departmental action to modify or to revoke and reissue this permit, any toxic effluent standard or prohibition established under Section 307(a) of the Clean Water Act (33 U.S.C. §1317(a)) is considered to be effective and enforceable against the permittee.

(4) Permit modification or revocation will be conducted according to 25 Pa. Code Chapter 92.

b. Duty to Provide Information

(1) The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or coverage approved under 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) When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Department, the permittee shall promptly submit such facts or information.

(4) The permittee shall give advance notice to the Department of any planned physical alterations or additions to the permitted facility which could, in any way, substantially affect the quality and/or quantity of storm water discharged from the facility.

c. Signatory Requirements

All Notices of Intent, Preparedness, Prevention and Contingency Plans, reports, certifications or information either submitted to the Department or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.

(1) All Notices of Intent shall be signed as follows:

(a) For a corporation: by a responsible corporate officer. For the purpose of this part, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(b) For a partnership or sole proprietorship. by a general partner or the proprietor, respectively; or

(c) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this part, a principal executive officer of a Federal agency includes (1) the chief executive

officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

(2) All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person.

A person is a duly authorized representative only if:

(a) The authorization is made in writing by a person described above and submitted to the Department with the reports.

(b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

(3) Changes in Authorization. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part B.1.c must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Transfer of Ownership or Control

(1) This permit is not transferable to any person except after notice to the Department.

(a) In the event of any pending change in control or ownership of facilities from which the authorize discharges emanate, the permittee shall notify the Department by letter of such pending change at least 30 days prior to the change in ownership or control.

(b) The letter shall be accompanied by the Notice of Intent and a written agreement between the existing permittee and the new owner or operator stating that the existing permittee shall be liable for violations of the permit up to and until the date of coverage transfer and that the new owner or operator shall be liable for permit violations under the permit from that date on.

(c) After receipt of the previously mentioned documentation, the Department shall notify the existing permittee and the new owner or controller of its decision concerning approval of the transfer. Such requests shall be deemed approved unless the Department notifies the applicant otherwise within 30 days.

(2) The Department may require the new owner or operator to apply for and obtain an individual NPDES permit, as stated in the cover sheet of this permit.

e. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters or drinking water shall be managed and disposed of in accordance with the requirements of the Solid Waste Management Act, 35 P.S. §6018.101, et seq., and in a manner such as to prevent any pollutant from such materials from adversely affecting the environment.

f. Facilities Construction, Operation, and Maintenance

The permittee shall design and build and, at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including Best Management Practices (BMPs) such as PPC Plans, E & S Plans, and any other storm water pollution prevention or management plans, which are installed or used by the permittee to achieve compliance with the conditions of this permit. BMPs shall be designed, implemented, and maintained to minimize or eliminate storm water runoff. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

g. Adverse Impact

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

h. Reduction, Loss, or Failure of the Treatment Facilities

Upon reduction, loss or failure of the treatment facilities, in order to maintain compliance with its permit, the permittee

shall control production and all discharges until either the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power for the treatment facility is reduced, lost, or failed.

i. Termination of Coverage

(1) Notice of Termination. Where all storm water discharges associated with industrial activity that are authorized by this permit are eliminated, the operator of the facility may submit a Notice of Termination that is signed in accordance with Part B.1.c. (signatory requirements) of this permit. The Notice of Termination shall include the following information:

(a) Name, mailing address, and location of the facility for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the facility to the nearest 15 seconds that the facility is located in;

(b) Up to four 4-digit SIC codes that best represent the principal products or activities provided by the facility;

(c) The operator's name, address, telephone number, ownership status and status as Federal, State, private, public or other entity;

(d) The NPDES permit for the storm water discharge associated with industrial activity identified by the Notice of Termination; and

(e) The following certification signed in accordance with Part B.1.c. (signatory requirements) of this permit:

"I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in stormwater associated with industrial activity to surface waters of the Commonwealth is unlawful under the Clean Water Act and Clean Streams Law

where the discharge is not authorized by an NPDES permit."

(2) Addresses. All Notices of Termination are to be sent to the appropriate Department Regional Office.

2. RESPONSIBILITIES

a. Duty to Comply

The permittee must comply with all terms and conditions of this permit. Any permit non-compliance constitutes a violation of the Pennsylvania Clean Streams Law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit or permit renewal.

b. Penalties for Violations of Permit Conditions

(1) Criminal.

(a) Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. In addition, Section 602 of the Clean Streams Law provides criminal penalties for violations of permit conditions.

(b) Knowing Violations. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In addition, Section 602 of the Clean Streams Law provides criminal penalties for violations of permit conditions.

(c) Knowing Endangerment. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 year, or both. In addition, Section 602 of the Clean Streams Law provides criminal penalties for violations of permit conditions.

(d) False Statement. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record,

report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309(c)(4) of the Clean Water Act). In addition, the provisions of the Pennsylvania Crimes Code relating to False Swearing and Unsworn Falsification provide criminal sanctions for such actions. See 18 Pa. C.S. §§4903-4904.

(2) **Civil Penalties.** The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation. In addition, Section 605 of the Pennsylvania Clean Streams Law provides for penalties up to \$10,000 a day for violations of permit conditions, for each separate offense.

(3) **Administrative Penalties.** The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

(a) **Class I penalty.** Not to exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000.

(b) **Class II penalty.** Not to exceed \$10,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$125,000.

c. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a 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.

d. Penalties and Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA (33 U.S.C. §1321) or Section 106 of CERCLA.

e. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

f. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

g. Other Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

h. Right of Entry

Pursuant to Sections 5(b) and 305 of the Pennsylvania Clean Streams Law (35 P.S. §§691.1(b) and 691.305) and 25 Pa. Code Chapter 92, and §1917-A of the Administrative Code, the permittee shall allow the head of the Department, the EPA Regional Administrator, and/or an authorized representative of EPA, DER, or, in the case of a facility which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents, as may be required by law, to:

(1) 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) Have access to and copy at reasonable times, any records that must be kept under the terms and conditions of this permit;

(3) Inspect any facilities or equipment (including monitoring and control equipment); and

(4) Sample any discharge of storm water.

i. Penalties for Falsification of Reports

Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§4903-4904.

j. Penalties for Falsification of Monitoring Systems

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the Clean Water Act. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§4903-4904.

k. Requiring an Individual Permit

(1) The Department may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit. Any interested person may petition the Department to take action under this paragraph. The Department may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit, coverage under this general permit shall automatically terminate. Individual permit applications shall be submitted within 90 days of notification from the Department to the address of the appropriate Regional Office shown in Part A.3 of this permit. The Department may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application as required by the Department, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

(2) Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by

applying for an individual permit. The owner or operator shall submit an individual application (the Department's Simplified Application Form or Form 1 and Form 2F) with reasons supporting the request to the Department. Individual permit applications shall be submitted to the address of the appropriate Regional Office of the Department. The request may be granted by the issuance of any individual permit if the reasons cited by the owner or operator are adequate to support the request.

(3) When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit. When an individual NPDES permit is denied to an owner or operator otherwise subject to this general permit, the owner or operator can continue discharging if he meets all eligibility requirements under the general permit. If the owner or operator does not meet the eligibility requirements of the general permit, or is otherwise prohibited from general permit coverage, coverage under the general permit is automatically terminated on the date of such denial, unless otherwise specified by the Department.

1. Monitoring and Records

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

3. DEFINITIONS

"Best Management Practices (BMPs)"

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollution to the waters of the Commonwealth. BMPs include PPC Plans, Erosion and Sedimentation Control Plans, Storm Water Management Act Plans, and other treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"BYPASS"

The intentional diversion of waste streams from any portion of a treatment facility.

"Coal Pile Runoff"

The rainfall runoff from or through any coal storage pile.

"Department"

The Department of Environmental Resources of the Commonwealth.

"Director"

The Secretary of the Department of Environmental Resources, or any authorized employee thereof.

"Flow-Weighted Composite Sample"

A composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

"Grab Sample"

A single "dip and take" sample collected at a representative point in the discharge stream.

"Landfill"

An area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

"Land Application Unit"

An area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

"Large and Medium Municipal Separate Storm Sewer System"

All municipal separate storm sewers that are either:

(a) Located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census; or

(b) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(c) Owned or operated by a municipality other than those described in paragraph (a) or (b) and that are designated by the

Department as part of the large or medium municipal separate storm sewer system.

"Municipality"

Any county, city, borough, town, township, school district, institution or any authority created by one or more of the foregoing. For the purposes of this definition, a town shall mean an unincorporated town.

"NOI"

The Notice of Intent for Coverage under the General Permit for Storm Water Discharges Associated Industrial Activities including Industrial Activities.

"Outfall" or "Point Source"

Point source as defined by 25 Pa. Code §92.1 which is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged.

"Person"

Any natural person, partnership, association, corporation, business organization, or any agency, instrumentality or entity of Federal or State Government. Whenever used in any clause prescribing and imposing a penalty, or imposing a fine or imprisonment or both, the term "person" shall not exclude the members of an association and the directors, officers, or agents of a corporation.

"Runoff Coefficient"

The fraction of total rainfall that will appear at the conveyance as runoff.

"SARA Title III, Section 313 Facility"

A facility that manufactures, imports, processes, or otherwise uses toxic chemicals listed under 42 U.S.C. §11023(c) and who, pursuant to Section 313 of Title III of SARA, are required to report annually their releases of those chemicals to any environmental media. Facilities that meet all of the following criterion for a calendar year are subject to title III reporting requirements for that calendar year:

- (1) The facility has 10 or more full-time employees;
- (2) The facility is in a SIC Code of 20 through 39;
- (3) The facility manufactured (including imported), processed or otherwise used a toxic chemical in excess of an applicable threshold quantity of that chemical set forth in 40 CFR 372.25.

"Section 313 Water Priority Chemical"

A chemical or chemical categories which:

- (1) Are listed at 40 C.F.R. Section 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986;
- (2) Are present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and
- (3) Meet at least one of the following criteria:
 - (a) Are listed in Appendix D of 40 C.F.R. Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances);
 - (b) Are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA and 40 C.F.R. Section 116.4; or
 - (c) Are pollutants for which EPA has published acute or chronic water quality criteria.

"Significant Materials"

Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

"Significant Spills"

Includes, but is not limited to: releases or oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 C.F.R. Section 110.10 and 40 C.F.R. Section 117.21) or Section 102 of CERCLA (see 40 C.F.R. Section 302.4)

"Storm Water"

Storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Associated With Industrial Activity"

For purposes of this general permit, 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 at an industrial plant into surface waters of the Commonwealth. The term does not include discharges from facilities or activities excluded from the NPDES Program. For the categories of industries identified in subparagraphs (1) through (9) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility material handling sites; refuse sites, including trash transfer stations, waste drop off sites, and waste processing facilities; sites used for the application or disposal of process waste waters (as defined at 40 C.F.R. Part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (10), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (10), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material

handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of a facility listed in paragraphs (1)-(10)) include those facilities designated under 40 C.F.R. Section 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity":

(1) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 C.F.R. Subchapter N (except facilities with toxic pollutant effluent standards which are exempted as described under 10 below);

(2) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;

(3) Facilities classified as Standard Industrial Classifications 10 through 14 (Mineral Industry), including active or inactive mining operations (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator), and oil and gas exploration, production, processing, treatment operations, or transmission facilities, that discharge storm water contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of such operations. This category does not include: (1) storm water discharges emanating from coal (anthracite and bituminous) mining activities subject to the effluent limits set forth in 25 Pa. Code Chapters 86-90, including discharges from coal mining activities that have obtained Stage II bond release pursuant to the standards set forth in 25 Pa. Code § 86.174; (2) storm water discharges emanating from surface non-coal mining activities subject to the effluent limitations set forth in 25 Pa. Code Chapter 77, including discharges from non-coal surface mines that have been released from reclamation requirements under the Noncoal Surface Mining Conservation and Reclamation Act and regulations promulgated thereto, after December 17, 1990; and (3) any other storm water discharges from active and inactive coal mining activities and

noncoal surface mining sites which are covered under an individual NPDES permit issued as part of a coal mining activity or noncoal surface mining permit in the Commonwealth;

(4) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(5) Landfills, and land application sites, that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(6) Facilities involved in the recycling of materials, including metal scrapyards, recycling centers, scrap metal processors, battery reclaimers, salvage yards, automobile yards, and other automotive dismantlers and recyclers, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(7) Steam electric power generating facilities, including coal handling sites;

(8) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-4225), 43, 44, 45 and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations;

(9) Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 million gallons per day (mgd) or more, or required to have an approved pretreatment program under 40 C.F.R. Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 C.F.R. Part 503. This category does not include Publicly Owned Treatment Works (POTWs) serving a population less than 100,000 which are not required to apply for and obtain NPDES permits for storm water discharges not covered under their existing NPDES permits pursuant to Section 1068(c) of the federal Intermodal Surface Transportation Efficiency Act of 1991; and

(10) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37, (except 373), 38, 39, 4221-25,

(and which are not otherwise included within categories (1)-(9)). The term includes only storm water discharges from all areas listed (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts, or industrial machinery are exposed to storm water.

"Surface Waters of the Commonwealth"

Any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface water, or parts thereof, including wetlands, whether natural or artificial, within or on the boundaries of this Commonwealth.

"Time-weighted Composite Sample"

A composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

PART C

OTHER CONDITIONS

1. PROHIBITION OF NON-STORM WATER DISCHARGES

a. Except as provided in paragraph C.1.a.(2) (below), all discharges covered by this permit shall be composed entirely of storm water.

(1) Except as provided in paragraph C.1.a.(2) (below), discharges of material other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.

(2) The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is in compliance with paragraph C.3.a.(3) 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 ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

2. RELEASES IN EXCESS OF REPORTABLE QUANTITIES

a. The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable PPC Plan for the facility. This permit does not relieve the permittee of the reporting requirements of 40 C.F.R. Part 117 and 40 C.F.R. Part 302 or 25 Pa. Code §101.2. Except as provided in paragraph C.2.b. of this permit, where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 C.F.R. 117 or 40 C.F.R. 302, occurs during a 24 hour period:

(1) The discharger is required to notify the National Response Center (NRC) (800-424-8802); in accordance with the requirements of 40 C.F.R. 117 and 40 C.F.R. 302 as soon as he or she has knowledge of the discharge;

(2) The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release

(including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken in accordance with paragraph C.2.a.(3) (below) of this permit to the appropriate Department Regional Office.

(3) The PPC plan required under Part C of this permit must be modified within 14 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate; and .

(4) If the release is an incident causing or threatening pollution, it must be reported to the Department immediately pursuant to 25 Pa. Code §101.2, and action must be taken to prevent injury to downstream users and to protect waters of the Commonwealth from pollution.

b. Multiple Anticipated Discharges

Facilities which have more than one anticipated discharge per year containing the same hazardous substance in an amount equal to or in excess of a reportable quantity established under either 40 C.F.R. 117 or 40 C.F.R. 302, which occurs during a 24-hour period, where the discharge is caused by events occurring within the scope of the relevant operating system shall:

(1) submit notifications in accordance with Part C.2.a.(2) (above) of this permit for the first such release that occurs during a calendar year (or for the first year of this permit, after submittal of an NOI);

(2) provide in the PPC plan required under Part C.3., a written description of the dates on which such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the release. In addition, the plan must be reviewed to identify measures to prevent or minimize such releases and the plan must be modified where appropriate; and

(3) the release shall be reported and abated immediately if it is an incident causing or threatening pollution pursuant to 25 Pa. Code §101.2.

c. Spills

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

3. PREPAREDNESS, PREVENTION AND CONTINGENCY PLANS

a. Development of Plan

Operators of facilities covered under this general permit shall have developed a Preparedness, Prevention and Contingency (PPC) Plan in accordance with 25 Pa. Code §101.3 and the Department's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans", and the supplemental PPC guidance for storm water. The PPC Plan shall identify potential sources of pollution which 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 which 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. The PPC Plan shall also include:

(1) Storm Water Management Practices.

The PPC Plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants) and the use of BMPs to control stormwater runoff and prevent storm water pollution. Based on an assessment of the potential of various sources at the plant to contribute pollutants to storm water discharges associated with industrial activity, the PPC Plan shall set forth measures determined to be reasonable and appropriate which shall be implemented and maintained.

(2) Sediment and Erosion Prevention.

The PPC Plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion. Sediment and Erosion prevention and control measures should be developed and implemented in accordance with Chapter 102 of the Department's rules and regulations and the Bureau of Land and Water Conservation's "Erosion and Sediment Pollution Control Program Manual."

(3) Non-Storm Water Discharges.

(a) The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water

at the site, a description of the results of any test and/or evaluation for the presence of non-storm 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 required by this part was not feasible. A discharger that is unable to provide the certification required by this part must notify in accordance with Part A.3.a of this permit.

(b) Except for flows from fire fighting activities, sources of non-storm water listed in Part C.1.a.2 (authorized non-storm water discharges) of this permit 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 non-storm water component(s) of the discharge.

(4) 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 at any time after the date of three years prior to the issuance of this permit. 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 processes; 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 Preparedness, Prevention and Contingency 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 to satisfy the requirements of Part C.3 of this permit 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.3.c. 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 certifications shall in no way relieve the owner or operator of a facility covered by the PPC Plan of their duty to prepare and fully implement such Plan.

b. Departmental Review and Compliance Schedule Requirements

(1) The PPC Plan shall be signed in accordance with Part B.1.c of this permit. This Plan shall be maintained on-site at all times and shall be made available for review by the Department, or authorized representative, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system. PPC Plans shall provide for compliance with the terms of the PPC Plan prior to submitting a NOI to be covered under this permit.

(2) If the PPC Plan is reviewed by the Department or its authorized representative, the permittee may be notified at any time that the plan does not meet one or more of the minimum requirements of this Part. After such notification from the Department or its authorized representative, the permittee shall make changes to the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise directed, the permittee shall have 30 days after such notification to make the necessary changes.

c. 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:

(1) 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.

(2) 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.

(3) A report summarizing the scope of the inspection, the names of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the PPC Plan, and actions taken in accordance with paragraph C.3.c.(2) (above) of the permit shall be made and retained as part of the PPC Plan for at least one year after coverage under this permit terminates. The report shall be signed in accordance with Part B.1.c. (signatory requirements) of this permit.

d. Consistency with Other Plans. PPC Plans may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 311 of the Clean Water Act or Best Management Practices (BMPs) Program otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the plan.

e. Facility Security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants to surface waters of the Commonwealth. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

f. Training. Facility employees and contractor personnel that work in areas where SARA Title III, Section 313 water priority chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the PPC Plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

g. Plan Update

The permittee shall periodically review and amend the PPC Plan.

At a minimum, this must occur when:

- (1) Applicable Department or federal regulations are revised, or this general permit is revised;
 - (2) The Plan fails in an emergency;
 - (3) There is a change in design industrial, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
 - (4) The list of emergency coordinators or equipment changes;
- or
- (5) As otherwise required by the Department.

4. DISCHARGES TO LARGE OR MEDIUM SEPARATE MUNICIPAL STORM SEWERS

a. Facilities with at least one storm water discharge associated with industrial activity to a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) in addition to maintaining copies of Discharge Monitoring Reports, in accordance with Part A.3.b. must submit, signed copies to the operator of the municipal separate storm sewer system of monitoring results on Discharge Monitoring Report Form(s). Facilities not required to report monitoring data under Parts A.2.c. and A.2.d., and facilities that are not otherwise required to monitor their discharges, need only to comply with the municipal notification provision.

b. Facilities covered by this permit must, in addition to the requirements of this general permit, comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

5. ADDITIONAL REQUIREMENTS FOR SALT STORAGE

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface waters of the Commonwealth shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Existing dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than three years after the date of issuance of this permit. All new discharges must meet this requirement upon NOI approval. Piles do not need to be enclosed or covered where stormwater from the pile is not discharged to surface waters of the Commonwealth.

6. CONTINUATION OF THE EXPIRED GENERAL PERMIT

This permit expires on midnight November 6, 1997. However, an expired general permit continues in force and effect until a new general permit is issued. Permittees must submit a new NOI in accordance with the requirements of this permit, using an NOI form provided by the Department (or photocopy thereof) by May 7, 1997 to remain covered under the continued permit after November 6, 1997. Facilities that had not obtained coverage under the permit by November 6, 1997 cannot become authorized to discharge under the continued permit.

7. REOPENER CLAUSE

If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the owner or operator of such discharge may be required to obtain individual permit or the permit may be modified to include different limitations and/or requirements.

Permit modification or revocation will be conducted according to 25 Pa. Code Chapter 92.

8. CERTIFICATION. Any person signing documents under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to

the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

APPENDIX A

MONITORING REQUIREMENTS FOR ALL SARA TITLE III, SECTION 313 FACILITIES

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
C-Biochemical Oxygen Demand (5-day)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Oil and Grease	(mg/L)	Grab only	1/6 Months
pH	(S.U.)	Grab only	1/6 Months
SARA Title III, Section 313			
Water Priority Chemicals +	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Total Phosphorous	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Total Kjeldahl Nitrogen	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months

* Permittees must report results for both a grab and a composite 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 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.

+ Any Section 313 water priority chemical for which the permittee is subject to reporting requirements under SARA Title III, Section 313.

APPENDIX B

MONITORING REQUIREMENTS FOR ALL PRIMARY METAL INDUSTRY FACILITIES

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
C-Biochemical Oxygen Demand (5-day)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Oil and Grease	(mg/L)	Grab only	1/6 Months
pH	(S.U.)	Grab only	1/6 Months
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Lead (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Chromium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Copper (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Cadmium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Arsenic (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Effluent Guideline Pollutants**	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite	1/6 Months

* Permittees must report results for 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 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.

** Any pollutant limited in an effluent guideline, to which the facility is subject.

APPENDIX C

MONITORING REQUIREMENTS FOR ALL LAND DISPOSAL UNITS,
INCINERATORS AND BIFS

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Oil and Grease	(mg/L)	Grab only	1/6 Months
pH	(S.U.)	Grab only	1/6 Months
Total Dissolved Solids (TDS)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Total Organic Carbon (TOC)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Barium (Total)	(mg/L)	1 Grab/	1/6 Months
Cadmium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Chromium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Lead (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Mercury (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Magnesium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Magnesium (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Selenium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Silver (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Ammonia	(mg/L)	Grab only	1/6 Months
Arsenic (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Cyanide (Total)	(mg/L)	Grab only	1/6 Months
Nitrate plus Nitrite Nitrogen	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months

* Permittees must report results for 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 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.

APPENDIX D

MONITORING REQUIREMENTS FOR ALL WOOD TREATMENT FACILITIES

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
C-Biochemical Oxygen Demand (5-day)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Oil and Grease	(mg/L)	Grab only	1/6 Months
pH	(S.U.)	Grab only	1/6 Months
Nitrate plus Nitrite Nitrogen	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months

In addition to the above-mentioned parameters, facilities that use chlorophenolic formulations shall sample for:

Pentachlorophenol	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
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In addition to the above parameters, as applicable, facilities which use creosote formulations shall sample for:

In addition to the above parameters, as applicable, facilities that use chromium-arsenic formulations shall sample for:

Arsenic (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Chromium (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Copper (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months

- * Permittees must report results for 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 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.

APPENDIX E

MONITORING REQUIREMENTS FOR ALL COAL PILE RUNOFF

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
Oil and Grease	(mg/L)	Grab only	1/6 Months
pH	(S.U.)	Grab only	1/6 Months
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Copper (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Nickel (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Zinc (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months

* Permittees must report results for 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 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.

APPENDIX F

MONITORING REQUIREMENTS FOR ALL BATTERY RECLAIMERS

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
Oil and Grease	(mg/L)	Grab only	1/6 Months
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
pH	(S.U.)	Grab only	1/6 Months
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Lead (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Copper (Total)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/6 Months

* Permittees must report results for 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 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.

APPENDIX G

MONITORING REQUIREMENTS FOR ALL AIRPORTS

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
C-Biochemical Oxygen Demand (5-day)	(mg/L)	1 Grab/ 1 Composite*	1/Year
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/Year
Oil and Grease	(mg/L)	Grab only	1/Year
pH	(S.U.)	Grab only	1/Year
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/Year
Primary ingredient used in the deicing materials	(mg/L)	1 Grab/ 1 Composite*	1/Year
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/Year

* Permittees must report results for 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 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.

APPENDIX H

MONITORING REQUIREMENTS FOR ALL COAL-FIRED STEAM ELECTRIC FACILITIES

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
Oil and Grease	(mg/L)	Grab only	1/Year
pH	(S.U.)	Grab only	1/Year
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/Year
Copper (Total)	(mg/L)	1 Grab/ 1 Composite*	1/Year
Nickel (Total)	(mg/L)	1 Grab/ 1 Composite*	1/Year
Zinc (Total)	(mg/L)	1 Grab/ 1 Composite*	1/Year
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/Year

- * Permittees must report results for 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 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.

APPENDIX I

MONITORING REQUIREMENTS FOR ALL ANIMAL HANDLING
AND MEAT PACKING FACILITIES

Discharge Parameter	(Units)	Sample Type	Measurement Frequency
C-Biochemical Oxygen Demand (5-day)	(mg/L)	1 Grab/ 1 Composite*	1/Year
Chemical Oxygen Demand	(mg/L)	1 Grab/ 1 Composite*	1/Year
Oil and Grease	(mg/L)	Grab only	1/Year
pH	(S.U.)	Grab only	1/Year
Total Suspended Solids	(mg/L)	1 Grab/ 1 Composite*	1/Year
Total Kjeldahl Nitrogen	(mg/L)	1 Grab/ 1 Composite*	1/Year
Total Phosphorous	(mg/L)	1 Grab/ 1 Composite*	1/Year
Fecal Coliform	(#/100ml)	1 Grab/ 1 Composite*	1/Year
Iron (Dissolved)	(mg/L)	1 Grab/ 1 Composite*	1/Year

* Permittees must report results for 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 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.

APPENDIX J

MONITORING*** FOR ADDITIONAL FACILITIES

Discharge Parameter (Units)	Sample Type	Measurement Frequency
C-Biochemical Oxygen Demand (5-day) (mg/L)	1 Grab/ 1 Composite*	1/Year
Chemical Oxygen Demand (mg/L)	1 Grab/ 1 Composite*	1/Year
Oil and Grease (mg/L)	Grab only	1/Year
pH (S.U.)	Grab only	1/Year
Total Suspended Solids (mg/L)	1 Grab/ 1 Composite*	1/Year
Total Kjeldahl Nitrogen (mg/L)	1 Grab/ 1 Composite*	1/Year
Total Phosphorous (mg/L)	1 Grab/ 1 Composite*	1/Year
Effluent Guideline Pollutants** (mg/L)	1 Grab/ 1 Composite*	1/Year
Iron (Dissolved) (mg/L)	1 Grab/ 1 Composite*	1/Year

* Permittees must report results for 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 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.

** Any pollutant limited in an effluent guideline to which the facility is subject.

*** Facilities subject to Appendix J are not required to monitor and may perform an annual inspection of the facility in lieu of monitoring.

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

**ADDITIONAL INFORMATION
FOR THE REPORTING OF STORM WATER DISCHARGE MONITORING**

(This form must be filled out for each outfall sampled)

A. PERMITTEE'S NAME:	OUTFALL / DISCHARGE NO.:
FACILITY / LOCATION:	
B. SAMPLED STORM EVENT	
Provide the date of storm event:	Provide the duration (in hours) of storm event:
Estimate rainfall measurements (in inches) of the storm which generated the sampled runoff:	Estimate the duration between the storm event sampled and the end of the previous measurement (greater than 0.1 inch rainfall) storm event:
Estimate the total volume (in gallons) of the discharge sampled:	
C. GRAB SAMPLE METHODOLOGY	
If a grab sample taken during the first thirty minutes of the discharge was impracticable, and the sample was instead taken during the first hour of the discharge, describe the circumstances:	
D. SAMPLE WAIVER	
If samples could not be collected due to adverse climatic conditions, describe why samples could not be collected. Attach available documentation of the event.	
If monitoring data submitted is being used to represent 2 or more substantially identical outfalls, the information on Page 2 must be submitted for each outfall that was not sampled.	

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

**ADDITIONAL INFORMATION
FOR THE REPORTING OF STORM WATER DISCHARGE MONITORING**

E. OUTFALL DRAINAGE AREAS

Please indicate size and runoff coefficient for each of those outfalls for which data has been submitted from a representative outfall indicated on Page 1 of this form

1	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
2	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
3	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
4	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
5	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
6	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
7	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
8	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
9	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>
10	Estimated size of the drainage area (in square feet):	Estimated runoff coefficient (Please check one): Low (under 40%) <input type="checkbox"/> Medium (40 to 65%) <input type="checkbox"/> High (over 65%) <input type="checkbox"/>

INFORMATION ON CHEMICAL ADDITIVES KNOWN OR EXPECTED TO BE PRESENT IN THE DISCHARGE

Outfall	Chemical Substance or Compound Trade Names or Specific Ingredients	Manufacturer Name and Address	Average & Maximum Usage Rate lbs/day	Concentration			Lowest Possible Analytical Detection Level (µg/l)	Whole product 96 Hr LC50 (mg/l) and species ⁽²⁾	Whole product 48 Hr LC50 (mg/l) and species
				In-system	Effluent	Units			

(1) This is the same data requirement as NPDES Permit application

(2) If LC₅₀ data to whole product is not available, data for the individual ingredients may be provided

REQUIRED INFORMATION for CHEMICAL ADDITIVES:

As a minimum the following information must be provided on the whole product: (If data on the whole product is not available, monitoring data for all active ingredients in the product shall be provided.)

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 (lb/gal) used to convert usage rate (gpd) to in-system concentrations (mg/l).
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 (blow down rate) and duration (hours).
11. Available data on the degradation 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.

Based on the information presented, the Department will decide whether specific effluent limitations for one or more active ingredients or other control requirements are necessary. Where necessary, the Department may establish permit limits, require other controls or deny use of these chemicals. If the information is complete, use of the proposed chemical additive or usage rate will be considered approved 60 days after the date of notification to the Department. If the notification is incomplete or the Department notifies the permittee that the proposed usage rate will cause violations of water quality standards, the permittee will be advised that a permit amendment is required and would likely be denied. All such letters and notifications must be kept onsite with the required daily chemical usage data.

Special Additional Requirements for Limited Use of Carcinogens

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 thoroughly investigate use of alternative products or chemicals to avoid the use of the carcinogens. If no 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. Based on the information presented, the Department will decide whether specific effluent limitations or other control requirements are necessary for the chemicals, and where necessary, establish permit limits, require other controls or deny use of these chemicals.

DETERMINATION OF NET TSS WORKSHEET

1) Obtain a grab sample from Schuylkill River on 4 consecutive days and composite.

2) On third day, initiate 24 hour composite sampling of Outfall 001.

3) On fourth day, retrieve 001 composite sample.

4) Analyze Schuylkill River composite for silica.

_____ mg/l

5) Analyze 001 composite for silica.

_____ mg/l

6) Determine concentration factor:

$$\frac{\text{001 Silica}}{\text{River Silica}} = \underline{\hspace{2cm}}$$

7) Analyze River composite for TSS

_____ mg/l

8) Determine background TSS

$$(\text{River composite TSS}) \times (\text{Concentration factor}) = \underline{\hspace{2cm}} \text{ mg/l}$$

9) Analyze 001 composite for TSS

_____ mg/l

10) Determine Net TSS

$$\text{001 Composite TSS} - \text{Background TSS} = \underline{\hspace{2cm}} \text{ mg/l}$$

INFORMATION ON CHEMICAL ADDITIVES KNOWN OR EXPECTED TO BE PRESENT IN THE DISCHARGE

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				In-system	Effluent	Units			

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DETERMINATION OF NET TSS WORKSHEET

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2) On third day, initiate 24 hour composite sampling of Outfall 001.

3) On fourth day, retrieve 001 composite sample.

4) Analyze Schuylkill River composite for silica.

_____ mg/l

5) Analyze 001 composite for silica.

_____ mg/l

6) Determine concentration factor:

$$\frac{\text{001 Silica}}{\text{River Silica}} = \underline{\hspace{2cm}}$$

7) Analyze River composite for TSS

_____ mg/l

8) Determine background TSS

$$(\text{River composite TSS}) \times (\text{Concentration factor}) = \underline{\hspace{2cm}} \text{ mg/l}$$

9) Analyze 001 composite for TSS

_____ mg/l

10) Determine Net TSS

$$\text{001 Composite TSS} - \text{Background TSS} = \underline{\hspace{2cm}} \text{ mg/l}$$