



FirstEnergy Nuclear Operating Company

Beaver Valley Power Station  
Route 168  
PO Box 4  
Shippingport, PA 15077-0004

**James H. Lash**  
General Manager

724-682-7773

January 8, 2003  
L-03-006

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

**Subject: Beaver Valley Power Station, Unit No. 1 and No. 2**  
**BV-1 Docket No. 50-334, License No. DPR-66**  
**BV-2 Docket No. 50-412, License No. NPF-73**  
**Amendment to NPDES Permit No. PA0025615**

Attached please find the draft National Pollutant Discharge Elimination System (NPDES) amendment package issued to Beaver Valley Power Station (BVPS) by the Pennsylvania Department of Environmental Protection (PA DEP). Please note the included "NPDES Public Notice" section that will be published in the Pennsylvania Bulletin, and must be posted near the access to the BVPS site and discharge points for 30 days.

This amended NPDES permit is being provided in accordance with the following:

- Unit 2 Operating License Appendix B - Environmental Protection Plan (Non-radiological)
- Unit 2 Licensing Condition 2.C.(2) Technical Specifications and Environmental Protection Plan
- Unit 1 Technical Specification Amendment No. 93, ND1NSM:2611, March 30, 1987: Permits or Certificates for Environmental Protection

Should you have any questions, please contact Mr. Edward Hubley, Manager Nuclear Environmental & Chemistry, at 724-682-7340.

Sincerely,

James H. Lash

Enclosure

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Beaver Valley Power Station, Unit No. 1 and No. 2  
Amendment to NPDES Permit No. PA0025615  
L-03-006  
Page 2

c: Mr. D. S. Collins, NRR Project Manager  
Mr. D. M. Kern, NRC Sr. Resident Inspector  
Mr. H. J. Miller, NRC Region I Administrator



Pennsylvania Department of Environmental Protection

400 Waterfront Drive  
Pittsburgh, PA 15222-4745

DEC 23 2002

Southwest Regional Office

412-442-4000  
Fax 412-442-4328

First Energy Nuclear Operating Company  
175 S. Main Street  
Akron, OH 44308

Re: Industrial Waste  
Beaver Valley Power Station  
NPDES Permit No. PA0025615  
Amendment No. 1  
Shippingport Borough  
Beaver County

Gentlemen:

We have prepared the enclosed draft National Pollutant Discharge Elimination System (NPDES) amendment for review and comment.

Also enclosed are copies of a public notice that we will publish in the Pennsylvania Bulletin. You are required, by Department regulations, to post copies of this notice near the entrance to your property and near the discharge site. These postings shall remain for 30 days.

Please review the draft permit carefully. Your written comments on the draft permit, if received within 30 days of publication in the Pennsylvania Bulletin, will be considered during preparation of the final permit.

Sincerely,

Kareen Milcic  
Sanitary Engineer

Enclosures

cc: EPA  
ORSANCO



## NPDES PUBLIC NOTICE

Southwest Regional Office: Regional Manager, Water Management, 400 Waterfront Drive, Pittsburgh, PA 15222-4745; 412-442-4000

PA0025615, Industrial Waste, SIC, 4911, First Energy Nuclear Operation Company, 75 S. Main Street, Akron, OH 44308.

This is for an amendment of an NPDES permit to discharge treated process water, sewage and untreated cooling water, and storm water from Beaver Valley Power Station in Shippingport Borough, Beaver County.

The following effluent limitations are proposed for discharge to the receiving waters, Ohio River and Peggs Run, classified as a warm water fishery with existing and/or potential uses for aquatic life, water supply, and recreation. For the purpose of evaluating effluent requirements for TDS, NO<sub>2</sub>, NO<sub>3</sub>, Fluoride, and Phenolics, the existing/proposed downstream potable water supply (PWS) considered during the evaluation is Midland Borough Water Authority, located at 1.0 miles below the discharge point.

OTHER CONDITIONS: This permit amendment is issued pursuant to a Consent Order and Agreement between the parties and is a settlement of the appeal docketed at EHB Docket No. 2001-023-R.

Outfall 001: existing 35.2 mgd discharge to Ohio River.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Free Available Chlorine			0.2	0.5	
Total Residual Chlorine			0.5		1.25
Chromium			0.2	0.2	
Zinc			1.0	1.0	
Clamtrol (CT-1)			Not Detectable		
Betz DT-1				35.0	
Hydrazine			Not Detectable		
Ammonia			Monitor and Report		
pH	not less than 6.0 nor greater than 9.0				

NPDES PUBLIC NOTICE - INDUSTRIAL WASTE  
PA0025615

Page 2

Outfall 003: existing 0.1 mgd discharge to Ohio River.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum

This discharge shall consist solely of uncontaminated yard storm water runoff, deionized water storage tank drainage and those sources monitored at 103, 203, 303, and 403.

Outfall 004: existing 0.001 mgd discharge to Ohio River.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Free Available Chlorine				0.2	0.5
Total Residual Chlorine			0.5		1.25
Chromium			0.2	0.2	
Zinc			1.0	1.0	

This overflow at Outfall 004 normally takes place during the months July through October when the water level in the cooling tower basin is raised to increase pumping efficiency. The blowdown at Outfall 301 comes from the same basin, and the limitations and restrictions placed on 301 apply also to this 004.

pH not less than 6.0 nor greater than 9.0

NPDES PUBLIC NOTICE - INDUSTRIAL WASTE  
PA0025615

Page 3

Outfall 008: existing 0.001 mgd discharge to Ohio River.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Suspended Solids			30	100	
Oil and Grease			15	20	
pH	not less than 6.0 nor greater than 9.0				

Outfall 010: existing 12.1 mgd discharge to Ohio River.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Free Available Chlorine				0.2	0.5
Total Residual Chlorine			0.5		1.25
Clamtrol (CT-1)	Not Detectable				
Betz DT-1				35.0	
pH	not less than 6.0 nor greater than 9.0				

NPDES PUBLIC NOTICE - INDUSTRIAL WASTE  
PA0025615

Page 4

Outfall 012: existing discharge to Peggs Run.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Zinc			1.5	1.5	
Copper			Monitor and Report		
Total Dissolved Solids			Monitor and Report		
pH	not less than 6.0 nor greater than 9.0				

Outfall 213: existing discharge to Outfall 013.

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Suspended Solids			30	100	
Oil and Grease			15	20	
Total Residual Chlorine			0.5		1.25
pH	not less than 6.0 nor greater than 9.0				

The monitoring of this discharge is not required when effluent from the Unit No. 2 cooling tower pump house floor and equipment drains is being recycled to the Unit No. 2 water recirculation system.

NPDES PUBLIC NOTICE - INDUSTRIAL WASTE  
PA0025615

Page 5

Outfall 013: existing discharge to Peggs Run (from permit issuance through three years after permit issue date).

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Chlorobenzene			Monitor and Report		
Copper			Monitor and Report		
Cyanide, tot			Monitor and Report		
pH	not less than 6.0 nor greater than 9.0				

Outfall 013: existing discharge to Peggs Run (from three years after permit issue date through expiration).

Parameter	Mass (lb/day)		Concentration (mg/l)		
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant. Maximum
Copper			0.05	0.1	0.125
Chlorobenzene			Monitor and Report		
Cyanide, tot			Monitor and Report		
pH	not less than 6.0 nor greater than 9.0				

The EPA waiver is not in effect.



FACT SHEET/STATEMENT OF BASIS

NPDES PA0025615

Prepared by: Kareen Milcic

Amendment No. 1

Date: May 18, 2002

Outfalls 001-013

Phone: 412-442-4000

(ES) First Energy Nuclear Operating Company

(MUN) Shippingport Borough

(AF) Beaver Valley Power Station

(CO) Beaver

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The Department issued NPDES PA0025615 to First Energy Nuclear Operating Company (FENOC) on December 27, 2001. The permittee appealed the NPDES permit issuance objecting to the following:

- A. With regard to Outfalls 301 and 401, the Final Permit should expressly state that the monitoring and reporting requirements for these Outfalls are applicable only during times when the discharges are routed to Outfall 010 and are not applicable during times when the discharges are routed to the Unit No. 2 water re-circulation system.
- B. The Final Permit should not require FENOC to monitor and report analytical results for Phenols, Iron and Aluminum at Outfalls 001 and 004.
- C. The Final Permit should not require FENOC to monitor and report analytical results for Iron, Aluminum, Phenols, Nitrate-nitrite, and Phosphorus at Outfall 003.
- D. The Final Permit should not require FENOC to monitor and report analytical results for Ammonia, Total Iron, Aluminum, Manganese, Phenols, Zinc, and Color at Outfall 008.
- E. The Final Permit should not impose discharge limitations for Chromium and Zinc at Outfall 012.
- F. The Final Permit should not require FENOC to monitor and report analytical results for Total Dissolved Solids ("TDS") and Copper at Outfall 012.
- G. With regard to Outfall 213, the Final Permit should expressly state that the monitoring and reporting requirements for this Outfall are applicable only during times when the discharge is routed to Outfall 013 and are not applicable during times when the discharge is routed to the Unit No. 2 water re-circulation system.
- H. The Final Permit should not impose monitoring or discharge limitations for Copper at Outfall 013.

FACT SHEET/STATEMENT OF BASIS

NPDES PA0025615

(ES) First Energy Nuclear Operating Company

(MUN) Shippingport Borough

(AF) Beaver Valley Power Station

(CO) Beaver

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- I. Alternatively, the Final Permit should provide a five-year compliance schedule for FENOC to comply with the Copper limitation at Outfall 013 within which FENOC should have the express option to conduct a dissolved metals translator to determine the appropriate Total Recoverable Copper limitation for Outfall 013.
  - J. The Final Permit should not impose monitoring requirements for Chlorobenzene at Outfall 013.
  - K. The Final Permit should not impose monitoring requirements for Total Cyanide at Outfall 013.
  - L. The Final Permit should not impose Total Residual Chlorine ("TRC") and Temperature limitations at Outfall 013.
  - M. The Final Permit should not impose weekly interim monitoring requirements at Outfall 013 for Flow, Copper, and Temperature, and the Final Permit should not impose semi-monthly monitoring requirements for Total Cyanide.
  - N. The Final Permit should not impose weekly final monitoring requirements at Outfall 013 for Flow, TRC, Copper, Chlorobenzene, Total Cyanide, Temperature, and pH.
  - O. Paragraph 16 of Part C of the Final Permit should not impose monitoring, reporting, and investigation requirements at Outfalls 001, 003, 004, 008, and at the intake for parameters such as Phenols, Iron, Aluminum, Manganese, and pH.
  - P. Paragraph 20 of Part C of the Final Permit should not require FENOC to conduct a Pollution Reduction Survey and Report regarding sources of Phenols at Outfalls 001, 003, 004, 008, 011, and 013 and sources of Chlorobenzene and Total Cyanide at Outfall 013.
  - Q. Paragraph 21 of Part C of the Final Permit should not require monitoring of storm water for Iron and Zinc and should not impose the specific demonstration regarding storm water quality.
  - R. Paragraph 22 of Part C of the Final Permit should not require FENOC to conduct sampling and analysis of all internal monitoring points for Groups 1-5 of the Application.
  - S. Paragraph 25 of Part C of the Final Permit should not require FENOC to conduct a Toxics Reduction Evaluation.

The Department and FENOC have met on several occasions and have participated on several conference calls to resolve the NPDES permit appeal. As a result, the Department and FENOC will enter into a Consent Order and Agreement, resolving the NPDES permit appeal. The Department will also amend the NPDES permit incorporating the following into Amendment #1:

## FACT SHEET/STATEMENT OF BASIS

NPDES PA0025615

(ES) First Energy Nuclear Operating Company

(MUN) Shippingport Borough

(AF) Beaver Valley Power Station

(CO) Beaver

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A. The permittee agrees to monitor IMP301 and 401, regardless of whether these discharges are recycled into the Unit #2 recirculation system. As requested by FENOC during the pendency of the administrative appeal, the permit will be modified to allow the permittee to route IMP301 to IMP401. When IMP301 is directed to IMP401, the permittee shall provide that information on the Discharge Monitoring Report Form.

B-D. In the Consent Order and Agreement which settled the administrative appeal, the permittee agreed to conduct influent/effluent monitoring to demonstrate that there is no net addition of pollutants to these discharges (Outfalls 001, 004, 003, and 008). This obligation will be removed from the permit and placed in the Consent Order and Agreement.

E. The limit for zinc was based on a single sample analysis. Nevertheless, the permittee agreed to the imposition of a final water quality based effluent limitation for zinc at Outfall 012 but needed a limited amount of time to further assess the quality of the discharge and if necessary, plan for and construct additional treatment facilities. This is a cooling tower blowdown from the HVAC system for the emergency response building. The chromium limit is deleted from the permit. Unlike zinc, there were low levels of chromium in this discharge.

F. The permittee agreed to monitor and report TDS and Copper in the discharge at Outfall 012. This outfall is subject to the pollutant reduction report condition of the permit (Condition C-20).

G. The permittee agreed that the monitoring of IMP213 is required when effluent from the Unit No. 2 cooling tower pumphouse floor and equipment drains is being recycled to the Unit No. 2 water circulation system. This language has been added to the permit amendment.

H-I. The permittee agreed to the Copper limit at Outfall 013 and the compliance schedule incorporated into the existing TRE provision of the NPDES permit. The permittee's request for an extensive compliance schedule cannot be incorporated into the permit. This is contrary to federal and state regulatory requirements.

J-K. The permittee agreed to the monitoring requirements for Chlorobenzene and Cyanide at Outfall 013.

L. The TRC limit at Outfall 013 is deleted from the permit. Through the course of the negotiations, the permittee identified IMP213 as a chlorinated discharge. In accordance with the Department's regulations, a BAT limit of 0.5 mg/l (monthly average) and 1.25 mg/l (instantaneous maximum) will be imposed at IMP213. The TRC limits at IMPs 113 and 213 are protective of water quality.

FACT SHEET/STATEMENT OF BASIS NPDES PA0025615

(ES) First Energy Nuclear Operating Company (MUN) Shippingport Borough

(AF) Beaver Valley Power Station (CO) Beaver

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The temperature limit at Outfall 013 has been deleted from the permit. The permittee shall install a sign warning "CAUTION - HEATED DISCHARGE!"

M-N. The Department has modified the monitoring requirements at Outfall 013.

O. Condition C-16 is deleted from the permit and replaced with a condition requiring the posting of the sign referenced in Paragraph L above.

P. Condition C-20 (Pollutant Reduction Report) is modified. Outfalls 012 and 013 are subject to this condition. The report shall be submitted by December 31, 2002.

Q. The permittee has agreed to provide additional storm water samples for those outfalls previously identified as inaccessible. The permittee has also agreed to ongoing monitoring of the storm water contributions to Outfalls 001, 003, and 008. Condition C-21 of the permit has been modified. The modified condition also allows additional time to collect the routine storm water samples in the event that they cannot be collected during the first 30 minutes of a storm event.

The modified condition also allows the permittee to sample, during the first calendar quarter after the permit is amended, Outfalls 012 and 013 which are parking lot drains. The Department will then determine based upon the analytical results if additional monitoring is necessary.

R. The permittee agreed to sample and analyze all internal monitoring points. For those IMPs where treatment facilities exist, one (1) influent and three (3) effluent samples will be collected. At all other IMPs, three (3) effluent samples will be collected. Condition C-22 of the permit has been modified, accordingly. The modification of this condition also allows additional time to collect this data. The Department and FENOC agreed, at the time the appeal was filed, to delay the imposition of the deadline pending resolution of the appeal.

S. Since the permittee has agreed to final water quality based effluent limits, the TRE Condition (C-25) will remain in the permit.

In addition to those changes outlined above, the permittee has requested that IMP110 be deleted from the permit. The permit is modified in response to this request.

KM:nm:njh

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATER MANAGEMENT PROGRAM

**DRAFT**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT PA0025615 AS ISSUED ON December 27, 2001**

**AMENDMENT NO. 1**

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

First Energy Nuclear Operating Company  
175 S. Main Street  
Akron, OH 44308

for a facility located at

Beaver Valley Power Station  
Shippingport Borough  
Beaver County

is amended as follows:

1. Page 2b (IMP301) is modified to include authorization to discharge IMP301 to IMP401.
2. Page 2c (IMP401) is modified to include IMP301 as a source into IMP401.
3. Page 2f (Outfall 001) is modified by deleting the monitor and report requirement for Phenols, Iron, and Aluminum.
4. Page 2m (Outfall 003) is modified by deleting the monitor and report requirement for Phenols, Iron, Aluminum, Nitrate-Nitrite, and Phosphorus and changing the sampling location of Outfall 003.
5. Page 2n (Outfall 004) is modified by deleting the monitor and report requirement for Iron, Aluminum, and Phenols. The sampling location of "Outfall 004" is added to this page.
6. Page 2q (Outfall 008) is modified by deleting the monitor and report requirement for Ammonia, Iron, Aluminum, Manganese, Phenols, Zinc and Color.
7. Page 2r is modified by deleting IMP 110. Subsequent pages have been renumbered.
8. Page 2s (Outfall 011) is modified by deleting the reference to Condition C-20.
9. Page 2v (Outfall 012) is modified by deleting the limit for Chromium, changing the measurement frequencies to 2/month for TDS, Zinc, and Copper and imposing a monitor and report requirement for Zinc. A two year compliance schedule is incorporated for Outfall 012.
10. Page 2w (Outfall 012) is added to the permit. The final water quality based effluent limit for Zinc is imposed within two years after the permit amendment issuance date.
11. Page 2y (IMP213) is modified by the addition of a TRC limit and a description of the monitoring of this discharge.
12. Page 2bb (Outfall 013) is modified by changing the measurement frequencies and sample types and deleting the temperature limit and the TRC limit.

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13. Page 2cc (Outfall 013) is modified by changing measurement frequencies and deleting the temperature limit and the TRC limit.
14. Condition C-16 is deleted from the permit and replaced with another condition requiring the posting of a sign warning of the heated discharge at Outfall 013.
15. Condition C-18(F) is modified by allowing the collection of storm water runoff sampling during the first 30 minutes of the discharge or as soon thereafter as practicable.
16. Condition C-20 is modified to limit the Pollution Reduction Report to Outfalls 012 and 013. Copper is eliminated from Outfall 012.
17. Condition C-21 is modified to delete Paragraphs 2 and 3. Paragraphs 2, 3 and 4 are added to this condition.
18. Condition C-22 is modified to change the date and to include three additional paragraphs explaining the required sampling.

The remainder of the permit is in full force and effect.

DATE AMENDMENT ISSUED \_\_\_\_\_ ISSUED BY \_\_\_\_\_

DATE EFFECTIVE \_\_\_\_\_

\_\_\_\_\_  
Tim V. Dreier, P.E.  
Water Management Program Manager

**DRAFT**

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 301 WHICH RECEIVES WASTE FROM:  
Unit #2 auxiliary boiler blowdown, which may, on occasion, be routed to IMP401\*
  - a. The permittee is authorized to discharge during the period from issued date through expiration date.
  - b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		2/month	grab
Oil and Grease			15	20		2/month	grab

\*It should be noted on the DMR when the wastewater discharge is conveyed to IMP401.

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: The discharge of boiler blowdown prior to mixing with any other water.

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1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 401 WHICH RECEIVES WASTE FROM:  
Drains from the chemical feed area of the auxiliary boilers for Unit #2, and on occasion, unit #2 auxiliary boiler blowdown (IMP301)

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		2/month	grab
Oil and Grease			15	20		2/month	grab
pH	not less than 6.0 standard units					2/month	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: Chemical feed area drains prior to mixing with any other water



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## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 001 (CONTINUED):

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Hydrazine*	Not Detectable		Using ASTM D-1385			1/week	grab
Ammonia*			Monitor and Report			1/week	grab
*Hydrazine and ammonia monitoring to apply during periods of wet layup.							
pH	not less than 6.0 nor greater than 9.0 standard units					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: At the discharge

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## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 003 WHICH RECEIVES WASTE FROM:

See below\*

at Latitude 40° 37' 26" Longitude 80° 26' 07" Stream Code 32317 River Mile Index (RMI) 946.0

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					2/month	estimate

\*This discharge shall consist solely of uncontaminated yard storm water runoff, deionized water storage tank drainage, and those sources monitored at 103, 203, 303, and 403.

See Condition C-21

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: Manhole Number 1 on Outfall 003.

## PART A

Page 2n of 14  
Permit PA0025615**DRAFT**

## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 004 WHICH RECEIVES WASTE FROM:

Unit #1 cooling tower overflow

at Latitude 40° 37' 30"

Longitude 80° 26' 02"

Stream Code 32317

River Mile Index (RMI) 946.3

a. The permittee is authorized to discharge during the period from issued date through expiration date.

b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

## DISCHARGE LIMITATIONS (gross unless otherwise indicated)

MONITORING  
REQUIREMENTS

Discharge Parameter	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	measured
			<u>Average Concentration</u>	<u>Maximum Concentration</u>			
Free Available Chlorine			0.2	0.5		1/week	grab
Total Residual Chlorine			0.5		1.25	1/week	grab
Chromium			0.2	0.2		2/year	grab
Zinc			1.0	1.0		2/year	grab

This overflow at Outfall 004 normally takes place during the months July through October when the water level in the cooling tower basin is raised to increase pumping efficiency. The blowdown at Outfall 001 comes from the same basin, and the limitations and restrictions placed on 001 apply also to this 004. Outfall 004 must be sampled when discharging and the results must be reported on the Discharge Monitoring Report.

The term "average concentration" as it relates to chlorine discharge means the average analyses made over a single period of chlorine release which does not exceed two hours.

pH	not less than 6.0 nor greater than 9.0 standard units	1/week	grab
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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: Outfall 004.

## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 008 WHICH RECEIVES WASTE FROM:

Unit #1 cooling tower pumphouse drains and storm water runoff

at Latitude 40° 37' 30"

Longitude 80° 26' 02"

Stream Code 32317

River Mile Index (RMI) 946.36

**DRAFT**

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		2/month	grab
Oil and Grease			15	20		2/month	grab
See Condition C-21							
pH	not less than 6.0 nor greater than 9.0 standard units					2/month	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: A valve after the discharge of the pumps.

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## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 010 WHICH RECEIVES WASTE FROM:

Once-through cooling water from Unit #2 heat exchangers

at Latitude 40° 37' 15"

Longitude 80° 26' 21"

Stream Code 32317

River Mile Index (RMI)

945.2

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	measured
			<u>Average Concentration</u>	<u>Maximum Concentration</u>			
Free available Chlorine			0.2	0.5		1/week	grab during chlorination
Total Residual Chlorine			0.5		1.25	1/week	grab during chlorination
Clamtrol CT-1			Not Detectable			when discharging	24 hr. comp.
Betz DT-1				35.0		when discharging	24 hr. comp.
<p>Refer to Part C for additional restrictions on free available and total residual chlorine, and the net addition of pollutants to non-contact cooling water.</p> <p>The term "average concentration" as it relates to chlorine discharge means the average analyses made over a single period of chlorine release which does not exceed two hours.</p>							
pH	not less than 6.0 nor greater than 9.0 standard units					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: At the emergency overflow structure.

**DRAFT**

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 011 WHICH RECEIVES WASTE FROM:  
 Diesel generator building oil/water separator drain (OWS #22) and turbine building oil/water separator drain (OWS #23) and storm water runoff  
 at Latitude 40° 37' 28" Longitude 80° 26' 05" Stream Code 32317 River Mile Index (RMI) 946.2

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate

This discharge shall consist solely of those sources  
 monitored at internal monitoring points 111 and 211  
 and yard storm water runoff. See Condition C-21.

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

**DRAFT**1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 111 WHICH RECEIVES WASTE FROM:  
Diesel generator building oil/water separator drain (OWS #22)

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		1/week	grab
Oil and Grease			15	20		1/week	grab
pH	not less than 6.0 nor greater than 9.0 standard units					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: at the discharge pipe.

**DRAFT**

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 211 WHICH RECEIVES WASTE FROM:  
Turbine building oil/water separator drain (OWS #23).
  - a. The permittee is authorized to discharge during the period from issued date through expiration date.
  - b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		1/week	grab
Oil and Grease			15	20		1/week	grab
pH	not less than 6.0 nor greater than 9.0 standard units					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: at the discharge pipe



**DRAFT**

## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 012 WHICH RECEIVES WASTE FROM:

Blowdown from the HVAC unit serving the emergency response facility and storm water runoff

at Latitude 40° 37' 25"

Longitude 80° 25' 47"

Stream Code 33515

River Mile Index (RMI) 0.1

- a. The permittee is authorized to discharge during the period from amendment issued date through two years after permit amendment issued date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/month	estimate
Total Dissolved Solids	Monitor and Report					2/month	grab
Zinc	Monitor and Report					2/month	grab
Copper	Monitor and Report					2/month	grab
The permittee is prohibited from adding chlorine, or chromium and zinc compounds to the cooling water unless the permittee obtains permission from the Department. See Conditions C-20 and C-21.							
pH	not less than 6.0 nor greater than 9.0 standard units					1/month	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: The blowdown valve above Manhole No. 012 on Outfall 012.

**DRAFT**

## 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 012 WHICH RECEIVES WASTE FROM:

Blowdown from the HVAC unit serving the emergency response facility and storm water runoff

at Latitude 40° 37' 25"

Longitude 80° 25' 47"

Stream Code 33515

River Mile Index (RMI) 0.1

- a. The permittee is authorized to discharge during the period from two years after permit amendment issued date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units		Concentrations			Measurement Frequency	Sample Type
	(lbs/day except flow)		(mg/l unless otherwise indicated)				
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/month	estimate
Total Dissolved Solids	Monitor and Report					2/month	grab
Zinc	1.5					2/month	grab
Copper	Monitor and Report					2/month	grab
The permittee is prohibited from adding chlorine, or chromium and zinc compounds to the cooling water unless the permittee obtains permission from the Department. See Conditions C-20 and C-21.							
pH	not less than 6.0 nor greater than 9.0 standard units					1/month	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: The blowdown valve above Manhole No. 012 on Outfall 012.

**DRAFT**

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 113 WHICH RECEIVES WASTE FROM:  
The sewage treatment plant serving Unit #2 and handling sanitary wastes

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	0.043					1/week	measured
CBOD-5 Day			25	50		2/month	8 hr. comp.
Suspended Solids			30	60		2/month	8 hr. comp.
Total Residual Chlorine			1.4		3.3	2/month	grab
% Removal (BOD-5 Day & SS)	refer to Part C						
Fecal Coliform Organisms	refer to Part C for effective disinfection					2/month	grab
pH	not less than 6.0 nor greater than 9.0 standard units					2/month	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: Overflow from the chlorine contact tank prior to mixing with any other water

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 213 WHICH RECEIVES WASTE FROM:  
Unit #2 cooling tower pumphouse floor and equipment drains

**DRAFT**

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING* REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		2/month	grab
Oil and Grease			15	20		2/month	grab
TRC			0.5		1.25	2/month	grab
*The monitoring of this discharge is not required when effluent from the Unit No. 2 cooling tower pumphouse floor and equipment drains is being recycled to the Unit No. 2 water recirculation system.							
pH	not less than 6.0 nor greater than 9.0 standard units					2/month	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: Discharge from the pumphouse prior to mixing with any other water

**DRAFT**

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 313 WHICH RECEIVES WASTE FROM:  
Turbine building oil/water separator drain (OWS #21)

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					1/week	estimate
Suspended Solids			30	100		1/week	grab
Oil and Grease			15	20		1/week	grab
pH	not less than 6.0 nor greater than 9.0 standard units					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: Discharge from OWS #21 prior to mixing with any other water

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR INTERNAL OUTFALL 413 WHICH RECEIVES WASTE FROM:  
Bulk fuel storage oil/water separator drain (OWS #24)

**DRAFT**

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					2/month	estimate
Suspended Solids			30	100		1/week	grab
Oil and Grease			15	20		1/week	grab
pH	not less than 6.0 nor greater than 9.0 standard units					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: Discharge from OWS #24 prior to mixing with any other water

## 1. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 013 WHICH RECEIVES WASTE FROM:

See below\*

at Latitude 40° 37' 25"

Longitude 80° 25' 47"

Stream Code 33515

River Mile Index (RMI) 0.1

**DRAFT**

- a. The permittee is authorized to discharge during the period from issued date through three years after permit issuance.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					2/month	estimate
Copper**	Monitor and Report					2/month	grab
Chlorobenzene	Monitor and Report					2/quarter	grab
Cyanide, tot	Monitor and Report					2/month	grab
*This discharge shall consist solely of uncontaminated storm water runoff and the sources monitored at 113, 213, 313, and 413.							
**See Condition C-25 See Conditions C-16, C-20 and C-21							
pH	not less than 6.0 nor greater than 9.0 standard units					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: This outfall is inaccessible. The permittee shall sample IMPs 113-413 for these parameters using a flow weighted composite (Copper, Cyanide-Total, Chlorobenzene and pH).

## 1. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 013 WHICH RECEIVES WASTE FROM:

See below\*

at Latitude 40° 37' 25" Longitude 80° 25' 47" Stream Code 33515 River Mile Index (RMI) 0.1

**DRAFT**

- a. The permittee is authorized to discharge during the period from three years after the permit issuance through expiration date.
- b. Based on the production data and/or 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. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)					MONITORING REQUIREMENTS	
	Mass Units (lbs/day except flow)		Concentrations (mg/l unless otherwise indicated)			Measurement Frequency	Sample Type
	Average Monthly	Max. Daily	Average Monthly	Max. Daily	Instant. Max.		
Flow (mgd)	Monitor and Report					2/month	estimate
Copper			0.05	0.1	0.125	2/month	24 hr. comp.
Chlorobenzene			Monitor and Report			2/month	24 hr. comp.
Cyanide, Total			Monitor and Report			2/month	24 hr. comp.
	*This discharge shall consist solely of uncontaminated storm water runoff and those sources monitored at 113, 213, 313 and 413.						
	See Conditions C-16						
pH	not less than 6.0 nor greater than 9.0 standard units					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: This outfall is inaccessible. The permittee shall sample IMPs 113-413 for these parameters using a flow weighted composite (Copper, Cyanide-Total, and pH). To calculate the 24 hr. composite for chlorobenzene, the permittee shall collect a series of grab samples for the composite.



Effluent limitations and monitoring requirements have been placed on Outfalls 001, 403 and 010. If any other outfall is affected, the CT-1 concentration is not to be detectable and the DT-1 concentration shall not exceed 35 mg/l (maximum daily). The amount of DT-1 in any discharge is to be estimated using the feed rate and discharge flow rate.

The permittee will ensure that all Clamtrol effluent is detoxified prior to discharge. If the product exhibits toxicity or impairment to the receiving stream's aquatic life, use is to be terminated immediately.

The permittee shall submit advanced (14 days) written notice of any large system dosings. Reports with the conclusions of large system dosings shall be submitted 120 days after dosing.

Clamtrol may also be used to treat small subsystems of the plant without detoxifying with clay. Quarterly reports on the amount of Clamtrol used, dates and times of product addition shall be recorded and submitted to the Department.

16. Within 30 days from the permit amendment date, the permittee shall post a warning sign at or near Outfall 013 that reads "Caution! Heated Discharge."
17. The permittee shall implement Best Management Practices to minimize the amount of deionized water storage tank drainage discharged through the storm water drains via Outfall 003.
18. Storm Water Discharges
  - A. Except as provided in Section B of this condition, all storm water discharges shall be composed entirely of uncontaminated storm water.
  - B. The following non-storm water discharges are authorized provided the non-storm water component of the discharge is in compliance with Section C of this condition: discharges from firefighting 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.
  - C. This permit does not authorize any discharge (storm water or non-storm water) which contains any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.
  - D. This permit does not authorize the discharge of any pollutant resulting from an on-site spill, any such occurrence is subject to Sections A.3.c or d of this permit.

**E. Preparedness, Prevention and Contingency Plans (PPC)**

1. Operators of facilities shall review and revise as appropriate the PPC Plan for the site in accordance with 25 Pa. Code, Chapter 91, Section 91.34 to address storm water. The PPC Plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the facility. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor storage activities, outdoor manufacturing or processing activities, significant dust or particulate generating process, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. In addition, the PPC Plan shall describe the implementation of practices which are to be used to reduce the pollutants in storm water discharges ensuring compliance with the terms and conditions of this permit.
2. Facilities subject to SARA Title III, Section 313 reporting requirements for releases of Section 313 water priority chemicals that have occurred within the last three years shall include a description of such releases in the PPC Plan.
3. Qualified personnel shall conduct site compliance evaluations at least once a year. A report summarizing the evaluation and any required follow-up actions shall be prepared and kept on-site. Such evaluations shall include the items in 3.a of this condition.
  - a. Areas contributing to a storm water discharge 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.
  - b. Based on the results of the inspection, the description of potential pollutant sources and pollution prevention measures and controls identified in the PPC Plan shall be revised as appropriate and shall provide for implementation of any changes to the plan in a timely manner.

## F. Sampling Requirements

Storm water samples are required by Part C of this permit Condition C-21. They shall be collected as a grab sample during the first 30 minutes of the discharge or as soon thereafter as practicable. Analytical results of the sampling event shall be summarized on the attached Discharge Monitoring Reports (DMR) and submitted to the Department. If it is not practicable to collect samples due to adverse climatic conditions, or other circumstances beyond the permittee's control, the discharger must submit an explanation with the DMR as to exactly why the samples could not be collected.

19. In order to demonstrate that Chromium and Zinc are not added for cooling tower maintenance, the permittee shall sample (grab) Outfalls 001, 004 and 012 twice per year in the same calendar month. The results of the sampling shall be summarized and submitted as an attachment to the next Discharge Monitoring Report Form.
20. For the pollutants listed at the outfalls below, the permittee shall survey the plant to identify the sources of the pollutants and submit a Pollutant Reduction Report to the Department by December 31, 2002. In the report the permittee shall describe the survey conducted and identify the sources of the pollutants. If the report determines that the permittee is the source of the pollutant(s) in the discharges, the permittee shall: (a) describe those measures that were tried after issuance of this permit and their effectiveness in meeting the discharge limitations and/or eliminating or reducing the pollutants; and (b) describe and submit schedules for those measures that will be put into effect.

<u>Outfall</u>	<u>Pollutants</u>
012	TDS
013	Chlorobenzene, Cyanide, total

21. Storm Water Pollution Prevention Plan (SWPPP)

Within one (1) year from the permit issuance date, the permittee shall submit a Storm Water Pollution Prevention Plan (SWPPP) for Outfalls 003, 008, 011, 012, and 013. The SWPPP shall identify Best Management Practices (BMPs), housekeeping procedures, and control structures installed or implemented to reduce the amounts of pollutants in Outfalls 003, 008, 011, 012, and 013 storm water discharges.

The storm water component of Outfalls 012 and 013 shall be sampled and analyzed within the first full calendar quarter following the issuance of amendment No. 1 to the NPDES permit. The storm water samples shall be analyzed for the storm water parameters identified in the NPDES permit application and shall include, at a minimum, Oil and Grease, BOD, COD, TSS, TKN, Nitrate plus Nitrite Nitrogen, Total Phosphorus, pH, Antimony, Cyanide (free), Cyanide (total), TRC, FAC, Ammonia, Hydrazine, Copper, Zinc, Iron, and Chromium (total). The analytical results shall be reported to the Department within sixty days of sample collection on the NPDES permit application form.

The storm water component of Outfalls 001, 003, and 008 shall be monitored within the second full calendar quarter following the issuance of amendment No. 1 to the NPDES permit. The storm water samples shall be analyzed for the storm water parameters identified above. The analytical results shall be reported to the Department within sixty days of sample collection on the NPDES permit application form.

Beginning in the third full calendar quarter following the issuance of amendment No. 1 to the NPDES permit, and in every calendar quarter thereafter, the storm water components for Outfalls 001, 003 and 008 shall be monitored for iron and zinc. The sample results shall be reported to the Department on Discharge Monitoring Reports in accordance with Condition C-1 of this permit.

22. On or before December 31, 2002, the permittee shall sample all internal monitoring points and report the results to the Department in accordance with the NPDES permit application and for the pollutants listed in Groups 1-5 of the application.

The influent (1 sample) and effluent (3 samples) shall be collected and analyzed at the following internal monitoring points: 101, 103, 203, 303, 403, 111, 211, 113, 313, and 413.

The effluent (3 samples) shall be collected and analyzed at the following internal monitoring points: 301, 401, 102, and 213.

The sample results shall be reported to the Department on the NPDES application form within sixty days of sample collection.

23. All discharges of floating materials, oil, grease, scum and substances which produce tastes, color, odors, turbidity or settle to form deposits shall be controlled at levels which will not be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life.
24. 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 (related to permits and requirements for landfilling, land application, incineration and storage of sewage sludge) Federal Regulations 40 CFR 257, and the Federal Clean Water Act and its amendments.

Sludges and other solids shall be handled and disposed of in compliance with the Solid Waste Management Act of 1980 (Act 97) and with 25 Pa. Code, Chapters 287, 291, and 299 (relating to residual waste generators) and 288 and 289 (relating to residual waste landfills and impoundments) and the Federal Clean Water Act and its amendments.

## 25. Toxics Reduction Evaluation (TRE)

## A. Preliminary Water Quality Based Effluent Limitations (PWQBELs)

1. Based on the discharge and stream data currently available to the Department, the PWQBELs denoted with an asterisk (\*) on page 2cc of 14 are necessary to protect the receiving stream uses designated in Chapter 93 of the Department's Rules and regulations. The Final WQBELs denoted with a double asterisk (\*\*) were developed based on sufficient discharge and stream data, and further site-specific data collection is not necessary. Therefore Sections A.2, C.2 and C.3 below do not apply to the \*\* parameters.
  2. Within 60 days of the permit effective date (PED), the permittee must submit notification to the Department verifying one of the following options has been selected:
    - a. The permittee accepts the Department's modeling which was the basis for the PWQBEL's and will not proceed with the optional site-specific data collection activities described in C.2 and C.3 below. In this case, the PWQBELs on page 2cc of 14 will be considered final and enforceable within three years of PED as currently shown on page 2cc of 14, and should be used as the basis for Phase II of the TRE.
- or
- b. The permittee agrees to conduct the optional site-specific discharge or stream data collection described in C.2 or C.3 below that would provide the Department with data for use in verifying and refining the PWQBELs. In this case, the PWQBELs on page 2cc of 14 would not go into effect until the Department modifies the permit. The permittee will be notified of the results of the Phase I review, at which time the permittee can proceed with Phase II.

If the permittee fails to select one of these options within 60 days of the PED, option "a" is selected by default.

3. In either case, the Permittee must conduct a TRE as outlined below. Phase I of the TRE has both required and optional components. The Department will review the Phase I report and may establish final WQBELs and compliance schedules through a permit modification. Any such permit modification shall be considered a formal permitting action by the Department. The permittee shall submit progress reports to the Department as shown on the TRE schedule below outlining the progress being made to achieve the final WQBELs and/or modify the PWQBELS.

## B. TRE Submission Requirements

1. The TRE shall be developed to:
  - a. confirm and quantify the presence of the pollutants in the discharge with PWQBELS.
  - b. verify or refine the modeling data and/or assumptions used to develop the PWQBELS.
  - c. identify sources of the pollutants with final WQBELS or PWQBELS.
  - d. recommend management practices, wastewater treatment technologies, or other control techniques to reduce or eliminate these pollutants.
2. A copy of the Department's "Guidelines for Conducting a Toxics Reduction Evaluation" is enclosed for your use. The TRE and associated reports shall be completed and submitted in accordance with the following schedule:

<u>Action</u>	<u>Date</u>
a. submit notification specified in A.2 above	within 60 days of PED
b. submit work plan for conducting Phase I	within 90 days of PED
c. start Phase I	within 120 days of PED
d. submit complete Phase I report (3 copies)	within 18 months of PED
e. start Phase II	within 30 days of notice from the Department to proceed with Phase II
f. submit complete Phase II report	within 180 days of notice to proceed with Phase II
g. progress reports	every three months starting 120 days after PED

**C. Phase I**

1. The permittee is required to submit Phase I of the TRE consisting of the following components:
  - a. influent and effluent quality review
  - b. source inventory and evaluation
  - c. source reduction evaluation
  - d. implementation of pollution prevention, sound housekeeping practices, and other management practices in accordance with 40 CFR 125 Subpart K.
2. The permittee has the option of providing all or some of the following site-specific data as part of Phase I for use in verifying and refining the PWQBELs:
  - discharge hardness
  - discharge pollutant concentration and variability
  - design discharge flow
  - discharge mixing characteristics
  - pollutant fate characteristics
  - stream width, depth and slope
  - stream velocity
  - ambient stream data for pollutants, pH, temperature
  - instream hardness
  - water intake quality and quantity
  - treatment plant influent pollutant concentrations
  - chemical translators
  - Water Effects Ratio (WER)

The permittee should contact the Department for guidance in determining which of the above data will have a significant impact on the PWQBELs and also for protocols on collecting and submitting the data. The Department will determine the adequacy of any site-specific data submitted and advise the permittee accordingly. If initial review of the submitted data suggests that additional data collection is necessary, the Department will so advise the permittee. The Department will notify the permittee what effect, if any, the data have on the PWQBELs using the procedure outlined in A.3 above.

3. Site-Specific Criteria

The PWQBELs for copper are necessary for the protection of aquatic life or human health. The permittee may request an opportunity to demonstrate alternative, site-specific criteria for these pollutants. The procedures for carrying out such demonstrations must receive written approval in advance by the Department and must be in accordance with the requirements of Section 93.8 of the Department's Rules and Regulations.

If the permittee chooses this option, requests for alternative, site-specific criteria must be submitted to the Department as part of the Phase I TRE report. Where the demonstration results in more stringent limitations than those previously established by the Department, the more stringent limitation will apply. Any less stringent limitations which are approved by the Department shall not violate any other applicable water criteria.

4. Alternative Site Specific Method Detection Limits (MDL)

In some cases, the PWQBEL may be less than the Method Detection Level (MDL) in the Department's Policy, 25 PA Code 16. In this event, the permittee has the option to demonstrate alternative, facility-specific MDLs to account for analytical matrix interference associated with the wastewater in question. The procedures for determining MDLs, published as Appendix B in 40 CFR 136 must be followed and complete documentation provided. The request for approval of

alternative facility-specific MDLs including all documentation required to support such a request must be submitted to the Department with the Phase I TRE report. The Department may grant a facility specific MDL by specifying "not detectable" as a WQBEL and including the numeric alternate MDL value for compliance purposes through the permit modification or renewal process.

D. Phase II

The permittee should not proceed with Phase II until notified by the Department to do so. Depending on the results of Phase I the PWQBELs may need to be modified or Phase II may not be necessary.

1. Source Reduction Evaluation

In addition to those items in C.1 above, as part of Phase II, the permittee must conduct source reduction evaluations including recycle, reuse, and process/chemical substitution. The intent of this portion of the TRE is to investigate and implement all low-cost, non-structural alternatives to reduce pollutants.



2. Final WQBEL Compliance Strategies and Schedule

A complete TRE report must consist of identification and assessment of all available pollution control options (Best Management Practices and/or treatment technologies and other structural alternatives) and their ability to comply with the PWQBELs and/or final WQBELs on page 2cc of 14 or other WQBELs identified in response to Phase I. The permittee must select a specific pollution control option that will achieve the applicable WQBELs and specify a schedule for the implementation of this option.

3. Section 95.4 Time Extension Requests

In some cases, the final WQBEL may not be technologically achievable using any combination of control options. In this event, the permittee has the option of requesting an extension of time to achieve the WQBEL, provided the permittee demonstrates eligibility for time extension under the requirements contained in 25 Pa. Code 95, Section 95.4 of the Department's Rules and Regulations. If the permittee elects to submit the 95.4 time extension request, the request must be submitted with Phase II of the TRE report. Forms are available from the Department to be used for any such requests.