

NRC



February 8, 1985

H. W. Keiser S&A

SUSQUEHANNA STEAM ELECTRIC STATION
NPDES PERMIT NO. PA 0047325 RENEWAL
CCN 741326 FILE 012-4
PLI- 38332

PP&L has received a new NPDES Permit No. 0047325 for monitoring water pollution discharges from the Susquehanna SES. This attached permit covers a period of five years beginning January 22, 1985 and incorporates and updates previous permits. The Station Chemistry Staff has participated in permit negotiations with the Pa. DER and is aware of the new permit requirements.

Overall, the new permit discharge limits are similar to earlier permits, however, some additional monitoring of certain waste streams is required. These additional monitoring locations include:

- o S-2 sedimentation pond discharge
- o Liquid radwaste discharge
- o Neutralization basin discharge (circwater pumphouse)
- o Waste filter discharge (circwater pumphouse)
- o Waste filter bypass (circwater pumphouse)

A description of the primary changes to each outfall is presented in Attachment 1.

To meet permit requirements, flow monitoring equipment needs to be installed at several of these discharge locations. The Station Chemistry Staff has initiated request for modifications as appropriate for the installation of the needed equipment on these outfalls. The Pa. DER has agreed to allow PP&L six months to install flow monitoring equipment on the S-2 pond discharge. For the remainder of these outfalls, flows can be estimated until the needed equipment is installed.

One open item from the previous NPDES permit is monitoring flow rates from the Units 1 and 2 cooling towers into the cooling tower blowdown line. The new permit also requires this instrumentation. During the Unit 1 First Refueling Outage, the cooling tower blowdown monitor is to be repaired (PMR 83-181B) to meet this requirement. The Unit 2 monitor is also to be repaired during its first refueling outage in 1986 (RFM 84-4569 formerly site PMR-709). Until this instrumentation is repaired, PP&L will continue to estimate cooling tower blowdown flows in the monthly Discharge Monitoring Reports submitted to the Pa. DER.

Another major project that should be completed in 1985 is upgrading the capacity of the Sewage Treatment Plant (STP) from 45,000 to 80,000 gallons per

8502280095 850208
PDR ADOCK 05000387
P PDR

2001
1/1

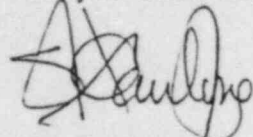
February 8, 1985

2

PLI-38332
CCN 741326 FILE 012

day (gpd). This new permit allows the Susquehanna SES STP to discharge up to 80,000 gpd. The larger plant should be able to meet station personnel needs and thereby minimize NPDES violations.

If you have any questions, please contact Jerry Fields at ETN 220-7889.



S. H. Cantone

JSF/dml

jsfmea002554i

cc: W. E. Barberich	A2-3	w/a	F. P. Huff	Haz. Chem. Lab	w/a
M. F. Basta	S&A	w/a	D. G. Ortz	S&A	w/a
J. A. Blakeslee	S&A	w/a	R. E. Rhoads	S&A	w/a
S. H. Cantone	A2-4	w/a	L. D. Rutman	N-4	w/a
R. E. Doebler	S&A	w/a	K. E. Shank	A1-B	w/a
R. L. Doty	A2-4	w/a	D. A. Stoner	A1-B	w/a
A. M. Ehritz	TW-2	w/a	H. D. Woodeshick	Spec. Off.	w/a
J. S. Fields	A1-B	w/a	SRMS Corresp. File	A6-2	w/a
J. B. Hansell	A1-B	w/a	SRMS Letter File	A6-2	w/o
A. Schwencer	NRC	w/a			

ATTACHMENT 1

NPDES PERMIT NO. PA 0047325 RENEWAL

NEW REQUIREMENTS/CHANGES

Outfall 070-S-2 Pond

- Installation of flow monitoring equipment within six months
- Required to measure flow, pH each day discharges are made to the pond
- Required to measure TSS and oil and grease monthly
- Effluent limits include pH of 6-9, TSS of 30 mg/l (average monthly) and 100 mg/l (max. daily), and oil and grease of 15, 20, and 30 mg/l (as average monthly, max. daily, and instantaneous maximums, respectively).

Outfall 071-Cooling Tower Blowdown Line

- Note change in chlorine limits. The 0.20 mg/l maximum daily limit is now defined as an "average limit over any 2-hour period of chlorine release," rather than a true maximum daily limit over the entire day (Special Condition #4).
- Addition of weekly zinc monitoring requirements with maximum daily limit of 1.0 mg/l
- Addition of yearly chromium monitoring requirement with maximum daily limit of 0.20 mg/l
- Change in total iron limit from 7.0 mg/l as a maximum daily to 6.8 mg/l as a monthly average.
- Addition of a weekly dissolved iron monitoring requirement with an instantaneous maximum limit of 7.0 mg/l.
- Change in required sample type (for Fe, Zn, Cr) to an 8-hour composite from existing grab sample used now.
- Deletion of TSS limits.
- The discharge flow monitor is required as it was in previous permit.

Outfalls 072-078-Miscellaneous Sumps

- No change from existing

Outfall 079-Sewage Treatment Plant (STP)

- No change from existing limits except average monthly flow limit changed from 0.045 MGD to 0.080 MGD to reflect proposed STP expansion.

Addition of four Internal Compliance Monitoring Points-Outfalls 171-471

- o Limits apply to: #171, Radwaste Discharge
#271, Waste Filter Bypass
#371, Neutralization Basin Discharge
#471, Waste Filter

- o Limits include:
 - Daily when discharging flow measurement
 - 1/month TSS and oil and grease monitoring
 - Effluent limits include TSS of 30.0 mg/l (average monthly) and 100 mg/l (max. daily) and oil and grease of 15.0 mg/l and 20.0 mg/l (average monthly and max. daily, respectively).



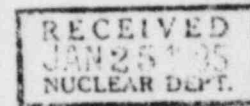
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bureau of Water Quality Management
90 East Union Street - 2nd Floor
Wilkes-Barre, Pennsylvania 18701



January 22, 1985

Pennsylvania Power & Light Company
Susquehanna Steam Electric Station
c/o Mr. Jerome Fields
Environmental Specialist - Nuclear
Two North Ninth Street, A2-4
Allentown, PA 18101



Dear Mr. Fields:

RE: Industrial Waste
NPDES Permit No. PA-0047325
Pennsylvania Power & Light Company
Susquehanna Steam Electric Station
Salem Township, Luzerne County

Subject permit is enclosed.

We have received your comments on the draft NPDES Permit on January 22, 1985 and have the following response:

- A) Concur with report to change flow and pH measurement frequency from "Daily" to "Daily When Discharged To". Six months is acceptable for the installation of flow measuring equipment on the S-2 pond discharge.
- B) 1. Concur.
2. Concur with 1/year measurement frequency for chromium.
3. Concur. Daily maximum and instantaneous maximum limits for iron have been deleted.
4. The steam electric BAT technology based limitations published in the Federal Register dated November 19, 1982 specifically state the limits as "Total Zinc" and "Total Chromium". No change in the draft permit will be made with respect to these two metals.
- C) Concur.
- D) Concur. Page 2H of 14 revised.

January 22, 1985

- E) Concur.
- F) pH limit deleted. Oil and grease monitoring frequency changed to 1/year. Flow measurement sample type changed to estimate.
- G) Concur. Flow measurement sample type changed to estimate.
- H) 1. Concur. Special Condition #3 revised.
2. Concur. Special Condition #9 revised.
3. As stated before, this Special Condition was in the previous NPDES Permit. It is not the Department's policy to place this condition in Renewal NPDES Permits.

Please note the Discharge Monitoring Reports will be prepared and sent to you by the Environmental Protection Agency.

Please study the permit carefully and direct any questions to this office. Our telephone number is (717) 826-2553.

Very truly yours,

Lawrence A. Pawlush
Water Quality Regional Manager

LAP:DRA:cu

Enclosures - NPDES Permit

cc: File
Permits & Compliance
Environmental Engineer
Water Enforcement Branch
Pennsylvania Section 3WM52
U.S. Environmental Protection Agency
Sixth & Walnut Streets
Philadelphia, PA 19106

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

RECEIVED
JAN 25 1985
NUCLEAR DEPT.

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

INDUSTRIAL PERMIT NO. PA 0047325

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.,

Pennsylvania Power & Light Co., Susquehanna Steam Electric Station
c/o Mr. Jerome Fields, Sr. Environmental Specialist - Nuclear
Two North Ninth Street, A2-4, Allentown, PA 18701

is authorized to discharge from a facility located at
Salem Township
Luzerne County

to receiving waters named Susquehanna River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B, and C hereof.

This permit and the authorization to discharge shall expire at midnight,
01/21/90.

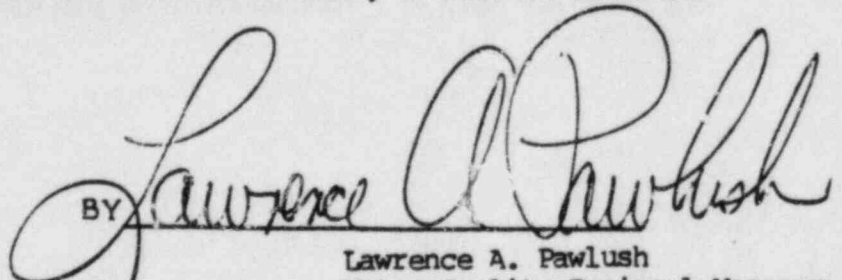
The authority granted by this permit is subject to the following further qualifications:

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

PERMIT ISSUED

DATE 01/22/85

BY



Lawrence A. Pawlush
Water Quality Regional Manager

TITLE

LAT 41°05'15"
 LONG 76°08'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 070, which receives waste from S-2 sedimentation pond.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE LIMITATIONS*

MONITORING REQUIREMENTS

Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency Daily When Discharged To	Sample Type Pump Rate or Weir	24 hr. Report Under Part A.2.D.
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX			
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0	30.0	1/Month	Grab	
pH	Not less than 6.0 standard units nor greater than 9.0 standard units at all times.							Daily When Discharged To	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 070 - Sedimentation pond overflow pipe.

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°07'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 071, which receives waste from Cooling tower blowdown.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

Discharge Parameter	<u>DISCHARGE LIMITATIONS*</u>			<u>MONITORING REQUIREMENTS</u>				24 hr. Report Under Part A.2.D.	
	Mass Units (lbs/day)		Concentrations (mg/l)	Inst. Maximum	Measurement Frequency	Sample Type			
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily			
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Daily	Recording Instrumentation
Free Available Chlorine (l)						.20	0.50	Daily	Grab During Chlorination
Zinc						1.0		1/Week	8 Hr. Composite
Total Chromium						0.20		1/Year	8 Hr. Composite
Iron (Total)	817.0			6.8				1/Week	8 Hr. Composite
Iron (Dissolved)							7.0	1/Week	8 Hr. Composite

Note: Neither Free Available Chlorine nor Total Residual Chlorine may 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 Free Available or Total Residual Chlorine at any one time unless the utility can demonstrate to the Regional Administrator or State that the units in a particular location cannot operate at or below this level of chlorination.

pH Not less than 6.0 standard units nor greater than 9.0 standard units at all times. Daily 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 071

(1) See Other Requirements Part C - Special Conditions No. 4 and No. 5.

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°08'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 072, which receives waste from Miscellaneous drains.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

Discharge Parameter	DISCHARGE LIMITATIONS*				CONCENTRATIONS (mg/l)				Inst. Maximum	Measurement Frequency Daily When Discharged	Sample Type	24 hr. Report Under Part A.2.D.	
	Mass Units (lbs/day)		Concentrations (mg/l)		Mass Units (lbs/day)		Concentrations (mg/l)						
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	XXX	XXX	Estimate	
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Estimate		
Total Suspended Solids				30.0		100.0				1/Month	Grab		
Oil & Grease				15.0		20.0			30.0	1/Month	Grab		
pH	Not less than 6.0 standard units nor greater than 9.0 standard units at all times.												

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 072 - Service and Administration Building surp.

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°08'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 073, which receives waste from Miscellaneous drains.

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

Discharge Parameter	<u>DISCHARGE LIMITATIONS*</u>						<u>MONITORING REQUIREMENTS</u>			24 hr. Report Under Part A.2.D.	
	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency	Sample Type		
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily		Daily When Discharged	Estimate		
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX				
Total Suspended Solids				30.0		100.0		1/Month	Grab		
Oil & Grease				15.0		20.0	30.0	1/Month	Grab		
pH	Not less than 6.0 standard units nor greater than 9.0 standard units at all times.								Daily When Discharged	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 073 - Unit #1 turbine building outer area sump.

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°08'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 074, which receives waste from Miscellaneous drains.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE LIMITATIONS*

MONITORING REQUIREMENTS

Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency	Sample Type	24 hr. Report Under Part A.2.D.
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Daily When Discharged	Estimate	
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0	30.0	1/Month	Grab	
pH	Not less than 6.0 standard units nor greater than 9.0 standard units at all times.							Daily When Discharged	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 074 - Unit #2 - Turbine Building outer area sump.

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°09'00"

I. Effluent Limitations and Monitoring Requirements for Outfall 076, which receives waste from:
 Acid storage tank area.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE LIMITATIONS*

MONITORING REQUIREMENTS

Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency Daily When Discharged	Sample Type Estimate	24 hr. Report Under Part A.2.D.
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX			
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0	30.0	1/Month	Grab	
pH	Not less than 6.0 standard units nor greater than 9.0 standard units at all times.							Daily When Discharged	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 076 - Acid and chlorine building sump.

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°08'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 077, which receives waste from Unit #1 - Condensate storage tank area (stormwater).

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE LIMITATIONS*

MONITORING REQUIREMENTS

Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency	Sample Type	24 hr. Report Under Part A.2.D.
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	

Note: This Permit authorizes the discharge of stormwater from Outfall 077 that collects in the diked area surrounding the Unit #1 condensate storage tank and refueling water storage tank. Any discharge other than stormwater requires prior approval from the Pennsylvania Department of Environmental Resources, Bureau of Water Quality Management.

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

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°08'45"

I. Effluent Limitations and Monitoring Requirements for Outfall 078, which receives waste from:
 Unit #2 Condensate Storage Tank Area (Stormwater).

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

Discharge Parameter	DISCHARGE LIMITATIONS*						MONITORING REQUIREMENTS			24 hr. Report Under Part A.2.D.
	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency	Sample Type	
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	

Note: This Permit authorizes the discharge of stormwater from Outfall 078 that collects in the diked area surrounding the Unit #2 condensate storage tank. Any discharge other than stormwater requires prior approval from the Pennsylvania Department of Environmental Resources, Bureau of Water Quality Management.

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

*Unless otherwise indicated, these are gross discharge limitations.

LAT 41°05'30"
 LONG 76°08'15"

I. Effluent Limitations and Monitoring Requirements for Discharge 079.

- A. During the period beginning 1/22/85 and lasting through 1/21/90 the permittee is authorized to discharge.
 B. The average monthly flow of effluent discharged from the wastewater treatment facility shall not exceed 0.03 million gallons per day.
 C. The quality of effluent shall be limited at all times as specified in Footnote (2) and as follows:

Discharge Parameter	<u>DISCHARGE LIMITATIONS</u>			<u>CONCENTRATIONS (mg/l)</u>			<u>MONITORING REQUIREMENTS</u>			24 hr. Report Under Part A.2.D.
	Mass Units (lbs/day)	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Inst. Maximum	Measurement Frequency	
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Daily	Pump Rate or Weir
BCD ₅		20.0			30.0			60.0	1/Month	8 Hr. Composite
Total Suspended Solids		20.0			30.0			60.0	1/Month	8 Hr. Composite
Free Available Chlorine									Daily	Grab
Percent Removal BCD ₅	-	See Footnote (2)							1/Month	8 Hr. Composite
Percent Removal TSS	-	See Footnote (2)							1/Month	8 Hr. Composite
pH	Within Limits of <u>6.0</u> to <u>9.0</u> Standard Units at All Times								Daily	Grab
Fecal Coliform	- Oct. 1 thru April 30 See Other Requirements - Part C, Special Condition No. 8 May 1 thru Sept. 30 See Other Requirements - Part C, Special Condition No. 9									

- Footnotes: 1. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 079 - Sewage Treatment Effluent.
2. In no case shall the arithmetic means of the effluent values of the Biochemical Oxygen Demand (five days) and Suspended Solids discharged during a period of 30 consecutive days exceed 15 percent of respective arithmetic means of the influent values for these parameters during the same time period, except as specifically authorized by the permitting authority.

LAT _____
 LONG _____

I. Effluent Limitations and Monitoring Requirements for Outfall 171, which receives waste from Redwaste treatment.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

Discharge Parameter	<u>DISCHARGE LIMITATIONS*</u>			<u>CONCENTRATIONS (mg/l)</u>			<u>MONITORING REQUIREMENTS</u>			24 hr. Report Under Part A.2.D.
	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency	Sample Type	
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily		Daily When Discharging		
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX		Estimate	
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0		1/Year	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 171 - Redwaste treatment plant effluent.

*Unless otherwise indicated, these are gross discharge limitations.

LAT _____
 LONG _____

I. Effluent Limitations and Monitoring Requirements for Outfall 271, which receives waste from Wastefilter bypass.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

Discharge Parameter	<u>DISCHARGE LIMITATIONS*</u>			<u>CONCENTRATIONS (mg/l)</u>			<u>MONITORING REQUIREMENTS</u>			24 hr. Report Under Part 1.2.D.
	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency	Sample Type	
	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	When Discharging	or Weir	
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0		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(s):
 At Outfall 271 - Prior to combining with circulating water system.

*Unless otherwise indicated, these are gross discharge limitations.

LAT _____
 LONG _____

I. Effluent Limitations and Monitoring Requirements for Outfall 371, which receives waste from Demineralizer and building drains from raw water treatment plant building.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

DISCHARGE LIMITATIONS*

MONITORING REQUIREMENTS

Discharge Parameter	Mass Units (lbs/day)			Concentrations (mg/l)			Inst. Maximum	Measurement Frequency Daily When Discharging	Sample Type Estimate	24 hr. Report Under Part A.2.D.
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	1/Month	Grab	
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0		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(s):
 At Outfall 371 - Neutralization basin discharge - prior to combining with circulating water system.

*Unless otherwise indicated, these are gross discharge limitations.

LAT _____
 LONG _____

I. Effluent Limitations and Monitoring Requirements for Outfall 471, which receives waste from Waste filter.

- a. The permittee is authorized to discharge during the period from 1/22/85 through 1/21/90.
- b. Based on the production data and anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply:

Discharge Parameter	<u>DISCHARGE LIMITATIONS*</u>			Concentrations (mg/l)			<u>MONITORING REQUIREMENTS</u>			24 hr. Report Under Part A.2.D.
	Mass Units (lbs/day)						Inst. Maximum	Measurement Frequency	Sample Type	
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily				
Flow (mgd)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	When Discharging		
Total Suspended Solids				30.0		100.0		1/Month	Grab	
Oil & Grease				15.0		20.0		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(s):
 At Outfall 471 - Waste filter effluent - prior to combining with circulation water system.

*Unless otherwise indicated, these are gross discharge limitations.

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 28th day of the following month. Duplicate signed copies of these and all other reports required herein, shall be submitted to the Department and the EPA Regional Office at the following addresses:

Commonwealth of Pennsylvania	Pennsylvania Section (323221 3WM52)
Department of Environmental Resources	Permits Enforcement Branch
Bureau of Water Quality Management	Enforcement Division
90 East Union Street - 2nd Floor	U.S. Environmental Protection Agency
Wilkes-Barre, Pennsylvania 18701	Region III
717/826-2553	6th and Walnut Streets
	Philadelphia, PA 19106

- (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 N/A

- 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.

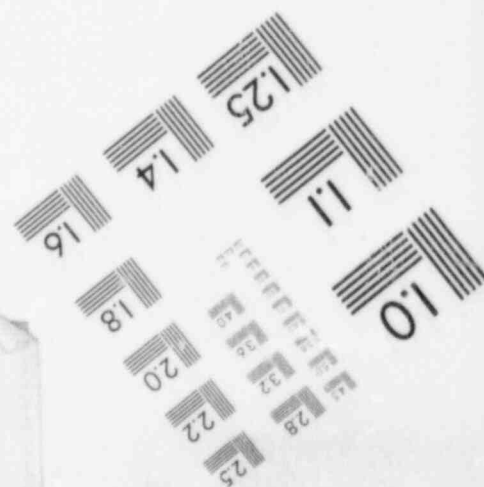
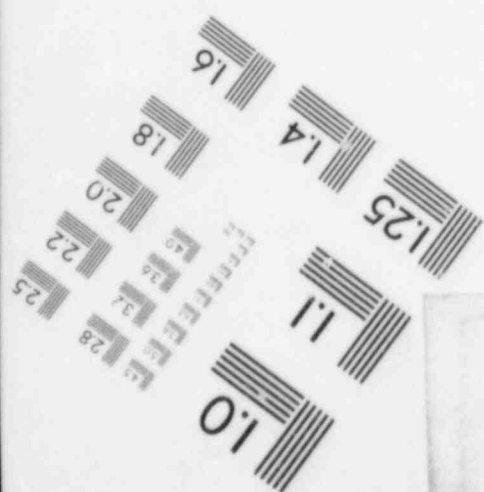
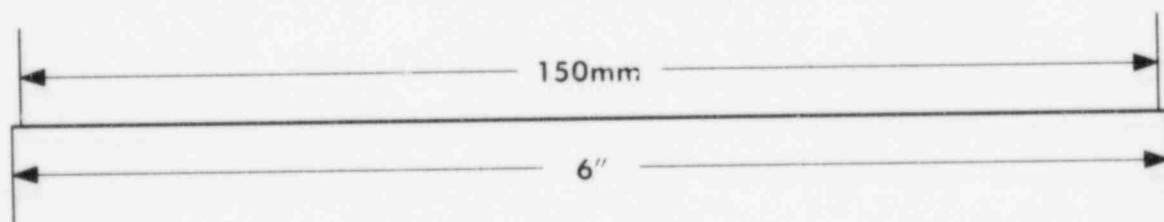
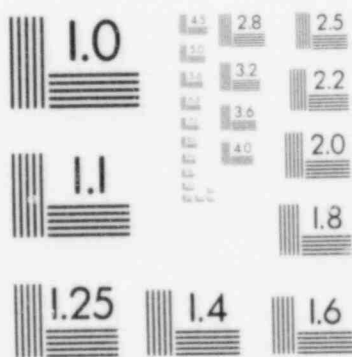
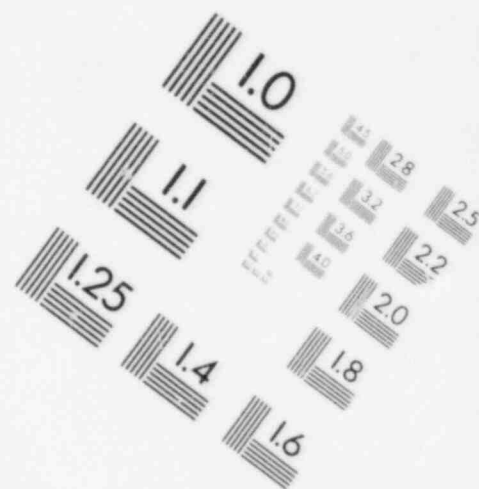
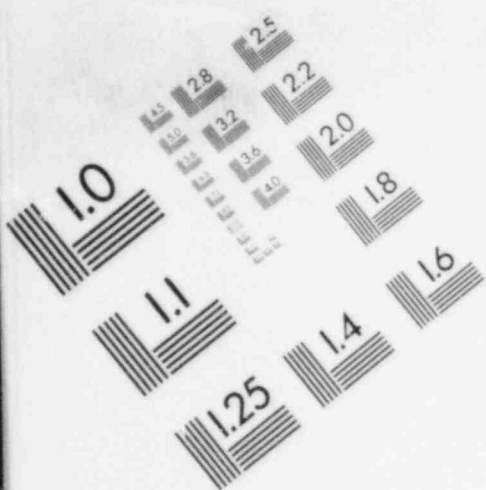
f. Other Laws

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.

IMAGE EVALUATION
TEST TARGET (MT-3)



PART C

OTHER REQUIREMENTS

Special Conditions

- 1) For Outfall 071, except for Total Zinc and Total Chromium, there shall be no detectable levels of the remaining priority pollutants in this discharge due to the addition of chemicals for cooling tower maintenance.
- 2) There shall be no discharge of Polychlorinated Biphenyl Compounds such as those commonly used for transformer fluid.
- 3) Waterborne releases of radioactive material to unrestricted areas shall conform to criteria set forth in Title 10 Code of Federal Regulations Part 50 Appendix I - "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion as Low as is Reasonably Achievable for Radioactive Material in Light - Water - Cooled Nuclear Reactor Effluents", as implemented through the Technical Specifications for the facility.

The facility operator shall provide the Department with copies of reports specifying the quantities of radioactive materials released to unquestioned 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 address:

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

- 4) The term "Daily Maximum Concentration" as it relates to chlorine discharge means the average of analyses made over a single period of chlorine release which does not exceed two hours.
- 5) The term "Free Available Chlorine" shall mean the value obtained using the amperometric titration method described in "Standard Methods for the Examination of Water and Wastewater", Page 112, (13th Edition).

PART C

OTHER REQUIREMENTS

Special Conditions (Cont'd)

- 6) The term "Total Residual Chlorine" or (Total Residual Oxidants for Intake Water with Bromides) means the value obtained using the amperometric method for total residual chlorine described in 40 CFR Part 136.
- 7) The pH of all discharges, except once through cooling water, shall be within the range of 6.0 to 9.0.
- 8) From October 1 through April 30, the fecal coliform concentration shall not exceed a geometric mean of 2000 mpn per 100 milliliters.
- 9) Effective disinfection to control disease producing organisms during the swimming season (May 1 through September 30) shall be the production of an effluent which will contain a fecal coliform concentration not greater than 200 mpn/100 ml as a geometric average value, not greater than 1000 mpn/100 ml in more than 10% of the samples tested.
- 10) This Permit supersedes NPDES Permit No. PA-0027448 issued on September 14, 1982, which authorizes the discharge of pollutants from the sewage treatment facility. Thirty (30) days after the issuance of this Permit, NPDES Permit No. PA-0027448 will be cancelled, unless objections are received within the thirty (30) day period.
- 11) The terms "pump rate or weir" and "estimate", as they relate to "flow measurement sample type" shall mean any method used to calculate/measure flow other than continuous recording instrumentation.