

NPDES PERMIT NO. PR0001660

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. § 1251 et. seq. (the "Act"),

Puerto Rico Electric Power Authority
P.O. Box 364267
San Juan, Puerto Rico 00936

hereinafter referred to as "the permittee" is authorized to discharge from a facility located at

Aguirre Power Complex
State Road No. 3, Int. 705
Salinas, Puerto Rico

to receiving water

Bahía de Jobos

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I and II hereof. All references to Title 40 of the Code of Federal Regulations are to regulations that are in effect on the effective date of this permit, including all amendments thereto published in the Federal Register. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations under Title 40 of the Code of Federal Regulations.

This permit shall become effective on EDP.

This permit and the authorization to discharge shall expire at midnight, EDP + 5 years.

Signed this day of

Barbara A. Finazzo
Director
Division of Environmental Planning
and Protection
U.S. Environmental Protection Agency
Region II

TABLE A-1 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from outfall serial number 001 Thermoelectric Plant condenser cooling water, Thermoelectric Plant service water cooling tower blowdown, Combined Cycle Plant condenser water cooling tower make up and blowdown, and stormwater . Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	kg/day (lbs/day)		Other Units (specified)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
Flow m ³ /day (MGD) ^{4,5}				2.47 x 10 ⁶ (652.0)*	Continuous Recording	
BOD ₅ (mg/l) ^{1,2,3}			30.0		Monthly	Composite
Cadmium (Cd) (µg/l)				5.0	Monthly	Grab
Color (Pt-Co units) β ^{2,3,4}	Shall not be altered except by natural causes.				Monthly	Grab
Copper (Cu) γ (µg/l) ^{2,3,4}				3.73	Quarterly	Grab
Dissolved Oxygen (mg/l) ^{1,2,3}	Shall not contain less than 5.0.				Daily	Grab
Lead (Pb) γ (µg/l) ^{2,3}				8.52	Quarterly	Grab
Mercury λ(µg/l)				----	Monthly	Grab
Oil and Grease (mg/l) ^{2,3}	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and				Monthly	Grab

TABLE A-1 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from outfall serial number 001 Thermoelectric Plant condenser cooling water, Thermoelectric Plant service water cooling tower blowdown, Combined Cycle Plant condenser water cooling tower make up and blowdown, and stormwater . Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	kg/day (lbs/day)		Other Units (specified)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
	greases.					
Oil and Grease (mg/l)			10.0	15.0	Twice per Month	Grab
pH (SU) ^{2,3,4}	Shall always lie between 7.3 and 8.5.				Daily	Grab
Polychlorinated Biphenyls (PCBs)	There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.				Monthly	Composite
Silver				2.0	Monthly	Grab
Solids and Other Matter ^{2,3}	The waters of Puerto Rico shall not contain floating debris, scum and other floating material attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the waterbody.				----	----
Suspended, Colloidal or Settleable Solids (ml/l) ^{1,2,3} #	Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the waters.				Daily	Grab
Taste and Odor Producing Substances ²	Shall not be present in amounts that will interfere with the primary				----	----

TABLE A-1 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from outfall serial number 001 Thermoelectric Plant condenser cooling water, Thermoelectric Plant service water cooling tower blowdown, Combined Cycle Plant condenser water cooling tower make up and blowdown, and stormwater . Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	kg/day (lbs/day)		Other Units (specified)		Measurement Frequency	Sample Type
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.		
	contact recreation, or will render any undesirable taste or odor to edible aquatic life.					
Temperature °F (°C) ^{2,3}				101.30 (38.5)	Daily	Grab
Total Suspended Solids (mg/l)			30.0	100.0	Monthly	Grab
Zinc (ug/L)				50.0	Monthly	Grab

Table A-1 Notes:

To comply with the monitoring requirements specified above, samples shall be taken at point of discharge 001.

All flow measurements shall achieve accuracy within the range of $\pm 10\%$.

* The daily maximum flow limitation does not consider the stormwater discharged through discharge point 001.

β Color shall be monitored at the effluent and the receiving water body.

The permittee shall perform the tests for Settleable Solids.

λ The permittee shall use EPA Method 1631 to analyze for Mercury.

1, 2, 3, and 4 see the endnotes to the Special Conditions.

TABLE A-1a EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from internal wastestream serial number 001a (condenser cooling water). Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>		<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
		Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Residual Chlorine (TRC) (1) (kg/day)			494	Continuous during period of chlorination	Multiple Grab (2)
Total Residual Chlorine (3)		No detectable amount allowed.		Annually	Grab
(1)	Total Residual Chlorine (TRC) may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrate to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.				
(2)	Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC discharge and once every 15 minutes thereafter until the end of the TRC discharge.				
(3)	Shall be applicable when chlorine is not used.				

To comply with the monitoring requirements specified above, samples shall be taken prior to mixing with other waste streams at sampling point 001a.

All flow measurements shall achieve accuracy within the range of $\pm 10\%$.

TABLE A-1b EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from internal wastestream serial number 001a (cooling tower blowdown Units 1 & 2). Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>		<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
		Daily Average	Daily Maximum	Measurement Frequency	Sample Type
Free Available Chlorine (1) (kg/day)		0.038	0.095	1/occurrence*	Multiple Grab (2)
Total Chromium		0.038	0.038	1/occurrence*	Grab
Total Zinc (kg/day)		0.190	0.190	1/occurrence*	Grab
126 Priority Pollutants		No detectable amount of the pollutants listed. See Appendix A on page 9. (3)		1/year	Composite***
(1)	Neither Free Available Chlorine (FAC) nor Total Residual Chlorine (TRC) 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 FAC or TRC chlorine at any time unless the permittee can demonstrate to EPA that the units in a particular location cannot operate at or below this level of chlorination.				
(2)	Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC discharge and once every 15 minutes thereafter until the end of the TRC discharge. “Daily Average” as it applies to FAC means the average of values taken over any individual chlorine release period and “Daily Maximum” as it applies to FAC means the instantaneous maximum at any time.				
(3)	Notice of any proposed use of compounds containing priority pollutants shall be made to EPA not later than 120 days prior to proposed use. Upon notice, EPA may modify this permit to authorize the use of such compound. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act is prohibited unless specifically authorized elsewhere in this permit.				
*	Occurrence refers to each discharge of cooling tower blowdown waste.				
**	First monitoring shall be performed at EDP + 6 months, and at 12 month intervals thereafter.				
***	Flow-proportioned or time-proportioned composite unless grab sample required by 40 CFR Part 136.				

To comply with the monitoring requirements specified above, samples shall be taken prior to mixing with other waste streams at sampling point 001b. All flow measurements shall achieve accuracy within the range of $\pm 10\%$.

TABLE A-1c EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from internal wastestream serial number 001c (sea water cooling tower No. 1 blowdown). Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>		<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
		Daily Average (kg/day)	Daily Maximum (kg/day)	Measurement Frequency	Sample Type
Free Available Chlorine(1) (kg/day)		1.895	4.739	Monthly	Multiple Grab (2)
Total Chromium (kg/day)		1.895	1.895	Monthly	Grab
Total Zinc (kg/day)		9.477	9.477	Monthly	Grab
126 Priority Pollutants	No detectable amount of the pollutants listed. See Appendix A on page 9. (3)			1/year*	Composite**
(1)	Neither Free Available Chlorine (FAC) nor Total Residual Chlorine (TRC) 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 FAC or TRC chlorine at any time unless the permittee can demonstrate to EPA that the units in a particular location cannot operate at or below this level of chlorination.				
(2)	Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC discharge and once every 15 minutes thereafter until the end of the TRC discharge. “Daily Average” as it applies to FAC means the average of values taken over any individual chlorine release period and “Daily Maximum” as it applies to FAC means the instantaneous maximum at any time.				
(3)	Notice of any proposed use of compounds containing priority pollutants shall be made to EPA not later than 120 days prior to proposed use. Upon notice, EPA may modify this permit to authorize the use of such compound. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act is prohibited unless specifically authorized elsewhere in this permit.				
*	First monitoring shall be performed at EDP + 6 months, and at 12 month intervals thereafter.				
**	Flow-proportioned or time-proportioned composite unless grab sample required by 40 CFR Part 136.				

To comply with the monitoring requirements specified above, samples shall be taken prior to mixing with other waste streams at sampling point 001b.
All flow measurements shall achieve accuracy within the range of $\pm 10\%$.

TABLE A-1d EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from internal wastestream serial number 001d (combined cycle condenser cooling tower). Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>		<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
		Daily Average (kg/day)	Daily Maximum (kg/day)	Measurement Frequency	Sample Type
Free Available Chlorine(1) (kg/day)		1.895	4.739	Monthly	Multiple Grab (2)
Total Chromium (kg/day)		1.895	1.895	Monthly	Grab
Total Zinc (kg/day)		9.477	9.477	Monthly	Grab
126 Priority Pollutants	No detectable amount of the pollutants listed. See Appendix A on page 9. (3)			1/year*	Composite**
(1)	Neither Free Available Chlorine (FAC) nor Total Residual Chlorine (TRC) 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 FAC or TRC chlorine at any time unless the permittee can demonstrate to EPA that the units in a particular location cannot operate at or below this level of chlorination.				
(2)	Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC discharge and once every 15 minutes thereafter until the end of the TRC discharge. “Daily Average” as it applies to FAC means the average of values taken over any individual chlorine release period and “Daily Maximum” as it applies to FAC means the instantaneous maximum at any time.				
(3)	Notice of any proposed use of compounds containing priority pollutants shall be made to EPA not later than 120 days prior to proposed use. Upon notice, EPA may modify this permit to authorize the use of such compound. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act is prohibited unless specifically authorized elsewhere in this permit.				
*	First monitoring shall be performed at EDP + 6 months, and at 12 month intervals thereafter.				
**	Flow-proportioned or time-proportioned composite unless grab sample required by 40 CFR Part 136.				

To comply with the monitoring requirements specified above, samples shall be taken prior to mixing with other waste streams at sampling point 001b.
All flow measurements shall achieve accuracy within the range of $\pm 10\%$.

TABLE A-2 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 002 condensate of fuel heaters, floor and equipment drains, miscellaneous use water and storm water runoff. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow m ³ /day (MGD) ^{3, 4}		946.35 (0.25)*	Continuous Recording	
BOD ₅ (mg/l) ^{1,2,3}	30.0		Annually	Grab
Cadmium (Cd) (µg/l)		5.0	Monthly	Grab
Color (Pt-Co units) β ^{2,3}	Shall not be altered except by natural causes.		Monthly	Grab
COD (mg/l)		100	Monthly	Composite
Dissolved Oxygen (mg/l) ^{1,2,3}	Shall not contain less than 5.0		Daily	Grab
Lead (Pb)(µg/l) ^{2,3}		8.52	Quarterly	Grab
Mercury (Hg) (µg/l) λ ^{2,3}		1.0	Monthly	Grab
Oil and Grease (mg/l) ^{2,3}	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.		Monthly	Grab
Oil and Grease (mg/l)	10.0	15.0	Twice per Month	Grab

TABLE A-2 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 002 condensate of fuel heaters, floor and equipment drains, miscellaneous use water and storm water runoff. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
pH (SU) ^{2,3}	Shall always lie between 7.3 and 8.5		Daily	Grab
Silver (Ag) (µg/l) ^{2,3}		1.0	Quarterly	Grab
Solids and Other Matter ^{2,3}	The waters of Puerto Rico shall not contain floating debris, scum or other floating material attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the waterbody.		----	----
Suspended, Colloidal or Settleable Solids (ml/l) ^{1,2,3} #	Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the waters.		Daily	Grab
Taste and Odor Producing Substances ²	Shall not be present in amounts that will interfere with the primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.		----	----
Temperature ° F (°C) ^{2,3}	Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90° F (32.2° C)		Daily	Grab
Total Suspended Solids (mg/l) ³		-----		
Turbidity (NTU) ^{2,3}		10	Monthly	Grab

Table A-2 Notes

To comply with the monitoring requirements specified above, samples shall be taken at the outfall of discharge serial number 002.
All flow measurements shall achieve accuracy within the range $\pm 10\%$.

* The daily maximum flow limitation does not considered the storm water discharged through discharge point 002.

β Color shall be monitored at the effluent and the receiving water body.

λ The permittee shall use EPA Method 1631 to analyze for Mercury.

The permittee shall perform the tests for Settleable Solids.

1, 2, 3, and 4 see the endnotes to the Special Conditions.

TABLE A-3 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 003 wastewater treatment plant effluent and storm water runoff. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristics		<u>Monitoring Requirements</u>		
		Monthly Average	Daily Maximum	Measurement Frequency Sample Type
Flow m ³ /day (MGD) ^{3, 4}			6,245.93 (1.65)*	Continuous Recording
BOD ₅ (mg/l) ^{1,2,3}		30.0		Annually Grab
Color (Pt-Co units) β ^{2,3,4}	Shall not be altered except by natural causes.			Monthly Grab
Copper (Cu) (μg/l) ^{2,3}			3.73	Monthly Grab
Cyanide, Free (CN) (μg/l) ε ^{2,3}			----	φ Grab
Dissolved Oxygen (mg/l) ^{1,2,3}	Shall not contain less than 5.0			Daily Grab
Mercury (Hg) (μg/l) λ ^{2,3}			----	Monthly Grab
Oil and Grease (mg/l) ^{2,3}	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.			Monthly Grab
Oil and Grease (mg/l)			15.0	Monthly Grab
pH (SU) ^{2,3}	Shall always lie between 7.3 and 8.5			Daily Grab

TABLE A-3 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 003 wastewater treatment plant effluent and storm water runoff. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristics		<u>Monitoring Requirements</u>		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Solids and Other Matter ^{2,3}	The waters of Puerto Rico shall not contain floating debris, scum and other floating material attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the waterbody.		----	----
Suspended, Colloidal or Settleable Solids (ml/l) ^{1,2,3} #	Solids from wastewater sources shall not cause deposition in or be deleterious to the existing or designated uses of the waters.		Daily	Grab
Taste and Odor Producing Substances ^{2,3}	Shall not be present in amounts that will interfere with the primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.		----	----
Temperature °F (°C) ^{2,3}	Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90 °F (32.2°C)		Daily	Grab
Total Suspended Solids (mg/l)	30.0	100.0	Monthly	Grab
Turbidity (NTU) ^{2,3}		10	Monthly	Grab

Table A-3 Notes

To comply with the monitoring requirements specified above, samples shall be taken at the outfall of discharge serial number 003.
All flow measurements shall achieve accuracy within the range $\pm 10\%$.

- * The daily maximum flow limitation does not considered the storm water discharged through discharge point 003.
- β Color shall be monitored at the effluent and the receiving water body.
- ϵ See Special Condition 8.
- λ The permittee shall use EPA Method 1631 to analyze for Mercury.
- ϕ The permittee shall implement a monthly monitoring program using the analytical method approved by EPA with the lowest possible detection level, in accordance with Section 6.2.3 of the PRWQSR as amended, for one (1) year period, after which they will be conducted annually. The monitoring program shall commence no later than thirty (30) days after the EQB's written approval of the Quality Assurance Project Plan (QAPP). The QAPP must be submitted for evaluation and approval of EQB no later than thirty (30) days after the EDP. The results of the monitoring program shall be submitted to EQB and EPA-Region II no later than sixty (60) days of completion of the one year monitoring program. Based on the evaluation of the results obtained, EQB will determine if an effluent limitation is necessary for these parameters. In such case the WQC will be reopened to include the applicable effluent limitation if considered necessary.

EPA Addendum: the one year monitoring program must be completed and submitted to EQB and EPA by [EDP + 5 years].

- # The permittee shall perform the tests for Settleable Solids.

1, 2, 3, and 4 see the endnotes to the Special Conditions.

TABLE A-3a EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from internal wastestream serial number 003a (central waste treatment plant effluent). Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type
Total Suspended Solids (mg/l)	30.0	100.0	Monthly	Composite
Oil and Grease	15.0	20.0	Twice per Month	Grab
Copper (Cu)	1.0	1.0	Monthly	Grab
Iron (Fe) (mg/l)	1.0	1.0	Monthly	Grab

To comply with the monitoring requirements specified above, samples shall be taken prior to mixing with other wastestreams at sampling point 003a.

All flow measurements shall achieve accuracy within the range $\pm 10\%$.

TABLE A-4 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 004 Combined Cycle Plant service water cooling tower blowdown, Combined Cycle Plant miscellaneous use water, sedimentation basin 2 effluent (stormwater from the fuel tanks dikes), stormwater runoff and groundwater. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Flow m ³ /day (MGD) ^{3,4}		151.42 (0.04)*	Continuous Recording	
BOD ₅ (mg/l) ^{1,2,3}	30.0		Annually	Grab
Color (Pt-Co Units) β ^{2,3}	Shall not be altered except by natural causes.		Monthly	Grab
Cyanide, Free (CN) (μg/l) ε ^{2,3}		----	φ	Grab
Dissolved Oxygen (mg/l) ^{1,2,3}	Shall not contain less than 5.0.		Daily	Grab
Lead (Pb) (μg/l) ^{2,3}		8.52	Quarterly	Grab
Mercury (Hg) (μg/l) λ ^{2,3}		1.0	Monthly	Grab
Oil and Grease (mg/l) ^{2,3}	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.		Monthly	Grab
Oil and Grease (mg/l) ^{2,3}	10.0	15.0	Twice per Month	Grab
Pentachlorophenol (μg/l) ^{2,3}		----	φ	Grab

TABLE A-4 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 004 Combined Cycle Plant service water cooling tower blowdown, Combined Cycle Plant miscellaneous use water, sedimentation basin 2 effluent (stormwater from the fuel tanks dikes), stormwater runoff and groundwater. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
pH (SU) ^{2,3}	Shall always lie between 7.3 and 8.5.		Daily	Grab
Silver (Ag) (µg/l) ^{2,3}		1.0	Monthly	Grab
Solids and Other Matter ^{2,3}	The waters of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.		----	----
Suspended, Colloidal or Settleable Solids (ml/l) ^{1,2,3}	Solids from wastewater source shall not cause deposition in or be deleterious to the existing or designated uses of the waters.		Daily	Grab
Taste and Odor Producing Substances ^{2,3}	Shall not be present in amounts that will interfere with the use of primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.		----	----
Temperature °F (°C) ^{2,3}	Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90°F (32.2°C).		Daily	Grab
Total Suspended Solids (mg/l) ³		----	Monthly	Grab
Turbidity (NTU) ^{2,3}		50	Monthly	Grab

TABLE A-4 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 004 Combined Cycle Plant service water cooling tower blowdown, Combined Cycle Plant miscellaneous use water, sedimentation basin 2 effluent (stormwater from the fuel tanks dikes), stormwater runoff and groundwater. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Zinc (Zn) ($\mu\text{g/l}$) ^{2,3}		50.00	Monthly	Grab

Table A-4 Notes:

To comply with the monitoring requirements specified above, samples shall be taken at point of discharge 004.
All flow measurements shall achieve accuracy within the range $\pm 10\%$.

- * The daily maximum flow limitation does not consider the stormwater discharged through discharge point 004.
- β Color shall be monitored at the effluent and the receiving water body.
- λ The permittee shall use EPA Method 1631 to analyze for Mercury.
- ε See Special Condition 4.
- ε
- ϕ The permittee shall implement a monthly monitoring program using the analytical method approved by EPA with the lowest possible detection level, in accordance with Section 6.2.3 of the PRWQSR, as amended, for one (1) year period, after which they will be conducted annually. The monitoring program shall commence not later than thirty (30) days after the EQB's written approval of the Quality Assurance Project Plan (QAPP). The QAPP must be submitted for evaluation and approval of EQB not later than thirty (30) days after the EDP. The results of the monitoring program shall be submitted to EQB and EPA-Region II no later than sixty (60) days of completion of the one year monitoring program. Based on the evaluation of the results obtained, EQB will determine if an effluent limitation is necessary for this parameter. In such case, the WQC will be reopened to include the applicable effluent limitation.

1, 2, 3 and 4 see endnotes to the Special Conditions.

TABLE A-4a EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through the permit expiration date, the permittee is authorized to discharge from internal wastestream serial number 004a (cooling tower blowdown). Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type
Free Available Chlorine (1)	0.114	0.284	Monthly	Multiple Grab (2)
Total Chromium	0.114	0.114	Monthly	Grab
Total Zinc	0.569	0.569	Monthly	Grab
126 Priority Pollutants	No detectable amount of the pollutants listed. See Appendix A on page 9. (3)		1/year*	Composite**

- (1) Neither Free Available Chlorine (FAC) nor Total Residual Chlorine (TRC) 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 FAC or TRC chlorine at any time unless the permittee can demonstrate to EPA that the units in a particular location cannot operate at or below this level of chlorination.
- (2) Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC discharge and once every 15 minutes thereafter until the end of the TRC discharge. "Daily Average" as it applies to FAC means the average of values taken over any individual chlorine release period and "Daily Maximum" as it applies to FAC means the instantaneous maximum at any time.
- (3) Notice of any proposed use of compounds containing priority pollutants shall be made to EPA not later than 120 days prior to proposed use. Upon notice, EPA may modify this permit to authorize the use of such compound. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act is prohibited unless specifically authorized elsewhere in this permit.

* Occurrence refers to each discharge of cooling tower blowdown waste.

** First monitoring shall be performed at EDP + 6 months, and at 12 month intervals thereafter.

*** Flow-proportioned or time-proportioned composite unless grab sample required by 40 CFR Part 136.

To comply with the monitoring requirements specified above, samples shall be taken prior to mixing with other wastestreams at sampling point 003b.
All flow measurements shall achieve accuracy within the range $\pm 10\%$.

TABLE A-5 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 005 Combined Cycle Plant service water cooling tower blowdown, Combined Cycle Plant miscellaneous use water, sedimentation basin 2 effluent (stormwater from the fuel tanks dikes), stormwater runoff and groundwater. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Flow m ³ /day (MGD) ^{3,4}		N/A	WFO	Estimated
COD (mg/l)		100.0	WFO	Grab
Oil and Grease (mg/l)		15.0	WFO	Grab
Oil and Grease (mg/l) ^{2,3}	The waters of Puerto Rico shall be substantially free from floating non-petroleum oils and greases as well as petroleum derived oils and greases.		WFO	Grab
pH (SU) ^{2,3}	Shall always lie between 7.3 – 8.5		WFO	Grab
Solids and Other Matter ^{2,3}	The waters of Puerto Rico shall not contain floating debris, scum or other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious to the existing or designated uses of the water body.		----	----
Suspended, Colloidal or Settleable Solids (ml/l) ^{1,2,3}	Solids from wastewater source shall not cause deposition in or be deleterious to the existing or designated uses of the waters.		WFO	Grab
Taste and Odor Producing Substances ^{2,3}	Shall not be present in amounts that will interfere with the primary contact recreation, or will render any undesirable taste or odor to edible aquatic life.		----	----

TABLE A-5 EFFLUENT LIMITATIONS AND REQUIREMENTS

During the period beginning on EDP and lasting through (EDP + 5 years) the permittee is authorized to discharge from outfall serial numbers 005 Combined Cycle Plant service water cooling tower blowdown, Combined Cycle Plant miscellaneous use water, sedimentation basin 2 effluent (stormwater from the fuel tanks dikes), stormwater runoff and groundwater. Such discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Temperature °F (°C) ^{2,3}	Except by natural causes, no heat may be added to the waters of Puerto Rico, which would cause the temperature of any site to exceed 90°F (32.2°C).		WFO	Grab
Total Suspended Solids (mg/l)		50.0	WFO	Composite

Notes:

To comply with the monitoring requirements specified above, samples shall be taken at point of discharge 005.
All flow measurements shall achieve accuracy within the range $\pm 10\%$.

N/A Not applicable.

WFO See Special Condition 18.

1, 2, 3 and 4 see endnotes to the Special Conditions.

TABLE A-6 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS AT THE EDGE OF THE MIXING ZONE

During the period beginning on EDP + 4 months and lasting through EDP + 16 months, the permittee shall perform monitoring at the mixing zone monitoring stations as specified below:

Receiving Waters Name: Bahía de Jobos, SB

<u>Effluent Characteristics</u>	<u>Gross Discharge Limitations^a</u>		<u>Monitoring Requirements</u>	
	Monthly Average	Daily Maximum	Measurements Frequency	Sample Type
Temperature °F (°C) ^{2,3,4}		90°F (32.2°C)	γ	Grab

Notes:

α See Special Condition 24

γ See Special Condition 24.m

2, 3 and 4 see endnotes to the Special Conditions.

TABLE A-7 MONITORING REQUIREMENTS AT THE BACKGROUND SAMPLING STATION

During the period beginning on EDP + 4 months and lasting through EDP + 16 months, the permittee shall perform monitoring at the background sampling station as specified below:

Receiving Waters Name: Bahía de Jobos, SB

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	Measurements Frequency	Sample Type
Temperature °F (°C) ^{2,3,4}	γ	Grab

Notes:
γ See Special Condition 24.m

1,2, 3 and 4 see endnotes to the Special Conditions.

Appendix A to 40 CFR Part 423
126 Priority Pollutants

Part I
Page 25 of 55 Pages
Permit No. PR0001660

001	Acenaphthene	048	Dichlorobromomethane	093	4,4-DDE (p,p-DDX)
002	Acrolein	051	Chlorodibromomethane	094	4,4-DDD (p,p-TDE)
003	Acrylonitrile	052	Hexachlorobutadiene	095	Alpha-endosulfan
004	Benzene	053	Hexachloromyclopentadiene	096	Beta-endosulfan
005	Benzidine	054	Isophorone	097	Endosulfan sulfate
006	Carbon tetrachloride (tetrachloromethane)	055	Naphthalene	098	Endrin
007	Chlorobenzene	056	Nitrobenzene	099	Endrin aldehyde
008	1,2,4-trichlorobenzene	057	2-nitrophenol	100	Heptachlor
009	Hexachlorobenzene	058	4-nitrophenol	101	Heptachlor epoxide (BHC-hexachlorocyclohexane)
010	1,2-dichloroethane	059	2,4-dinitrophenol	102	Alpha-BHC
011	1,1,1-trichloroethane	060	4,6-dinitro-o-cresol	103	Beta-BHC
012	Hexachloroethane	061	N-nitrosodimethylamine	104	Gamma-BHC (lindane)
013	1,1-dichloroethane	062	N-nitrosodiphenylamine	105	Delta-BHC (PCB-polychlorinated biphenyls)
014	1,1,2-trichloroethane	063	N-nitrosodi-n-propylamin	106	PCB-1242 (Arochlor 1242)
015	1,1,2,2-tetrachloroethane	064	Pentachlorophenol	107	PCB-1254 (Arochlor 1254)
016	Chloroethane	065	Phenol	108	PCB-1221 (Arochlor 1221)
018	Bis(2-chloroethyl) ether	066	Bis(2-ethylhexyl) phthalate	109	PCB-1232 (Arochlor 1232)
019	2-chloroethyl vinyl ether (mixed)	067	Butyl benzyl phthalate	110	PCB-1248 (Arochlor 1248)
020	2-chloronaphthalene	068	Di-N-Butyl Phthalate	111	PCB-1260 (Arochlor 1260)
021	2,4, 6-trichlorophenol	069	Di-n-octyl phthalate	112	PCB-1016 (Arochlor 1016)
022	Parachlorometa cresol	070	Diethyl Phthalate	113	Toxaphene
023	Chloroform (trichloromethane)	071	Dimethyl phthalate	114	Antimony
024	2-chlorophenol	072	1,2-benzanthracene (benzo(a) anthracene)	115	Arsenic
025	1,2-dichlorobenzene	073	Benzo(a)pyrene (3,4-benzo-pyrene)	116	Asbestos
026	1,3-dichlorobenzene	074	3,4-Benzofluoranthene (benzo(b) fluoranthene)	117	Beryllium
027	1,4-dichlorobenzene	075	11,12-benzofluoranthene (benzo(b) fluoranthene)	118	Cadmium
028	3,3-dichlorobenzidine	076	Chrysene	119	Chromium
029	1,1-dichloroethylene	077	Acenaphthylene	120	Copper
030	1,2-trans-dichloroethylene	078	Anthracene	121	Cyanide, Total
031	2,4-dichlorophenol	079	1,12-benzoperylene (benzo(ghi) perylene)	122	Lead
032	1,2-dichloropropane	080	Fluorene	123	Mercury
033	1,2-dichloropropylene (1,3-dichloropropene)	081	Phenanthrene	124	Nickel
034	2,4-dimethylphenol	082	1,2,5,6-dibenzanthracene (dibenzo(h) anthracene)	125	Selenium
035	2,4-dinitrotoluene	083	Indeno (1,2,3-cd) pyrene (2,3-o-pheynylene pyrene)	126	Silver
036	2,6-dinitrotoluene	084	Pyrene	127	Thallium
037	1,2-diphenylhydrazine	085	Tetrachloroethylene	126	Silver
038	Ethylbenzene	086	Toluene	128	Zinc
039	Fluoranthene	087	Trichloroethylene	129	2,3,7,8-tetrachloro-dibenzo-p- dioxin (TCDD)
040	4-chlorophenyl phenyl ether	088	Vinyl chloride (chloroethylene)		
041	4-bromophenyl phenyl ether	089	Aldrin		
042	Bis(2-chloroisopropyl) ether	090	Dieldrin		
043	Bis(2-chloroethoxy) methane	091	Chlordane (technical mixture and metabolites)		
044	Methylene chloride (dichloromethane)	092	4,4-DDT		
045	Methyl chloride (dichloromethane)				
046	Methyl bromide (bromomethane)				
047	Bromoform (tribromomethane)				

SPECIAL CONDITIONS

1. The flow of discharge 001, 002, 003 and 004 shall not exceed the limitation of 2.47 x 10⁶ m³/day (652.0 MGD), 946.35 m³/day (0.25 MGD), 6,245.93 m³/day (1.65 MGD) and 151.42 m³/day (0.04 MGD) as daily maximum, respectively. No increase in flow of the aforementioned discharges shall be authorized without a recertification from the Puerto Rico Environmental Quality Board (EQB).^{1,4,6}
2. The discharge 005 will only consist of waters composed entirely of storm water.⁴
3. No toxic substances shall be discharged, in toxic concentrations, other than those allowed as specified in the NPDES permit. Those toxic substances included in the Permit Renewal Application, but not regulated by the permit, shall not exceed those concentrations as specified in the applicable regulatory limitations.^{1,2}
4. Within thirty (30) days after the Effective Date of the NPDES Permit (EDP), the permittee shall submit, for EPA approval, a modified method to analyze Free Cyanide with a detection level lower than the applicable water quality standard (1.0 µg/L). No later than sixty (60) days after the EPA approval of such method, the permittee should take Free Cyanide samples at the sampling points for discharges 003 and 004, according to the requirements of Tables A-3 and A-4.⁴
5. The waters of Puerto Rico shall not contain any substance attributable to discharge 001, 002, 003, 004 and 005 at such concentration which, either alone or as a result of synergistic effect with other substances, is toxic or produces undesirable physiological responses in human, fish or other fauna or flora.²
6. All sample collection, preservation, and analysis shall be carried out in accordance with the Title 40 of the Code of Federal Regulations (40 CFR) Part 136. A licensed chemist authorized to practice the profession in Puerto Rico shall certify all chemical analyses. All bacteriological tests shall be certified by a microbiologist or a medical technician licensed to practice the profession in Puerto Rico.^{1,3}
7. The solid wastes (sludge, screenings and grit) generated due to the treatment system operation shall be:
 - a. Disposed in compliance with the applicable requirements established in the 40 CFR Part 257. A semiannual report shall be submitted to EQB and EPA notifying the methods used to dispose the solid wastes generated in the facility. Also, copy of the approval or permit applicable to the disposal method used shall be submitted, if any.
 - b. Transported adequately in such way that access is not gained to any body of water or soil. In the event of a spill of solid waste on land or into a body of water, the permittee shall notify the Point Sources Permits Division of the EQB's Water Quality Area in the following manner:
 - i. By telephone communication within a term no longer than twenty four (24) hours after the spill (787-767-8073).
 - ii. By letter, within a term no longer than five (5) days after the spill.

These notifications shall include the following information:

- a) Spill material
- b) Spill volume
- c) Measures taken to prevent the spill material to gain access to any body of water.

This special condition does not relieve the permittee from its responsibility to obtain the corresponding permits from the EQB's Solid Wastes Program and other state and federal agencies, if any. ^{4,7}

8. A log book should be kept for the material removed from the treatment system, such as sludge, screenings and grit, detailing the following items:
- a. Removed material, date and source of it.
 - b. Approximate volume and weight.
 - c. Method by which it is removed and transported.
 - d. Final disposal and location.
 - e. Person that offers the service.

A copy of the Non-Hazardous Solid Wastes Collection and Transportation Service Permit issued by the authorized official from the EQB should be attached to the log book. ³

9. The sludge produced within the facility due to the operation of the treatment system shall be analyzed and all constituents shall be identified as required by "Standards for the Use or Disposal of Sewage Sludge" (40 CFR, Part 503). The sludge shall be disposed properly in such manner that water pollution or other adverse effects to surface waters or to ground water do not occur. ^{4,7}
10. No changes in the design or capacity of the treatment system will be permitted without the previous authorization of EQB. ⁶
11. Prior to the construction of any additional treatment system or prior to the modification of the existing one, the permittee shall obtain the approval of the engineering report, plans and specifications from EQB. ⁶
12. The permittee shall install, maintain and operate all water pollution control equipment in such manner as to be in compliance with the applicable Rules and Regulations. ^{1,4}
13. The discharges 001, 002, 003, 004 and 005 shall not cause the presence of oil sheen in the receiving water body. ²
14. The rain gauge installed in the facility shall be properly maintained. Maintenance records of the rain gauge must be kept. In case of the modification, repair or replacement of such measuring device, it shall be calibrated again if it is necessary. ^{3,4}
15. The permittee should keep daily records of rain, indicating the date, reading of the rain gauge and duration for such events during normal business hours of the facility. Copy of these records shall be submitted monthly to EQB. ³

16. BEST MANAGEMENT PRACTICES PLAN (BMP PLAN) ⁴

- a. A copy of the most recent version of the approved BMP Plan shall be maintained at the facility and shall be available upon request.
- b. The BMP Plan shall be reviewed each five year and modified if necessary. A certification that the BMP Plan was reviewed shall be submitted not later than ninety (90) days after the EDP.
- c. Whenever changes occur at the facility that materially increase the potential for releases of pollutants or when situations occur that reflect that the plan is inadequate, the BMP Plan shall be modified to include preventive measurements in order to address those situations.
- d. If a modification of the BMP Plan is necessary, the permittee shall submit the modified BMP Plan to EQB for review and approval within ninety (90) days from the date when the Plan was revised or changes in the facility occurred. The modified BMP Plan shall be implemented within ninety (90) days after the EQB has approved the modified BMP Plan.

17. The permittee shall comply at all times with the provisions, measures or practices included in the most recent version of the BMP Plan (Special Condition 16) approved by EQB. ⁴

18. WHEN FLOW OCCURS (WFO) ⁴

WFO - For our purposes means when flow occurs during normal business hours of the facility, but not more often than one rainfall sampling per month.

a. First Half of Month

During the first fifteen (15) days of the month, sampling shall be as follows: A minimum period of 48 hours without measurable precipitation (measurable precipitation being rainfall greater than 0.1 inch) shall precede the storm event to be sampled. For parameters, which require grab samples, the sample shall be taken during the first thirty (30) minutes of entirely storm water discharge.

b. Second Half of Month

In the event that the permittee is unable to satisfy the above condition during the first fifteen (15) days of the month, beginning on the sixteenth (16th) day of the month, the permittee shall sample any entirely storm water discharge which occurs during normal business hours of the facility.

c. General Requirements

The permittee must report in a cover letter attached to each Discharge Monitoring Report (DMR), details of the conditions under which the entirely storm water samples were taken and the date of sampling.

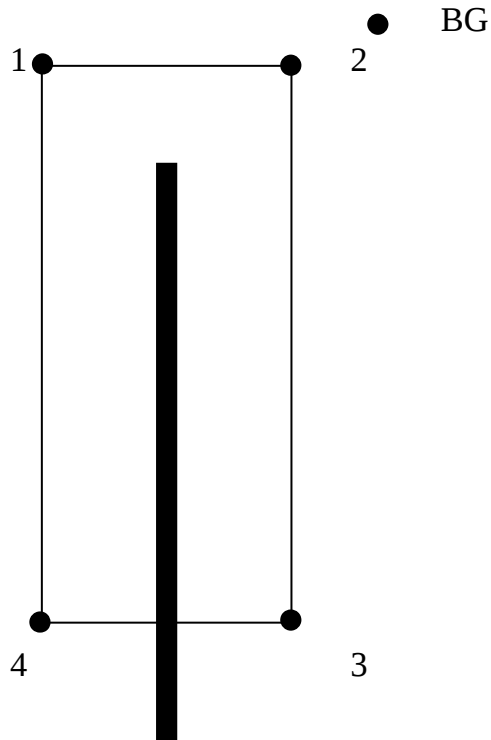
Alternatively, if no samples are taken during the month, the permittee will be considered to have met its sampling requirement if the permittee certifies that it was not possible to meet the specified sampling protocol during the first fifteen (15) days of the month and that there was no appreciable discharge of storm water during normal business hours from the sixteenth (16th) day of the month to the last day of the month.

19. The storm water discharges associated with industrial activities covered by this WQC will not cause violations to the applicable water quality standards at the receiving water body. ³
20. The flow measurement devices for the discharges 001, 002, 003, 004 and 005 shall be periodically calibrated and properly maintained. Calibration and maintenance records must be kept in compliance with the applicable Rules and Regulations. ^{4,6}
21. The sampling points for discharges 001, 002, 003, 004 and 005 shall be located immediately after the primary flow measuring devices of the effluents.
22. The sampling points for discharges 001, 002, 003, 004 and 005 shall be labeled with a 18 inches x 12 inches (minimum dimensions) sign that reads as follows:

"PUNTO DE MUESTREO PARA LA DESCARGA 001"
"PUNTO DE MUESTREO PARA LA DESCARGA 002"
"PUNTO DE MUESTREO PARA LA DESCARGA 003"
"PUNTO DE MUESTREO PARA LA DESCARGA 004"
"PUNTO DE MUESTREO PARA LA DESCARGA 005"

23. All water or wastewater treatment facility, whether publicly or privately owned, must be operated by a person licensed by the Potable Water and Wastewaters Treatment Plants Operators Examining Board of the Commonwealth of Puerto Rico. ⁴
24. The EQB has defined and authorized an Interim Mixing Zone (IMZ) pursuant to Article 5 of the Puerto Rico Water Quality Standards Regulation (PRWQSR), as amended. ³
 - a. The IMZ is delineated by the following points (See Diagram I):

DIAGRAM-I
Aguirre Power Complex Mixing Zone



Geographic Coordinates

Point 1	Lat. 17° 56' 5.02" Long. 66° 13' 38.08"
Point 2	Lat. 17° 56' 4.16" Long. 66° 13' 41.38"
Point 3	Lat. 17° 56' 7.37" Long. 66° 13' 42.29"
Point 4	Lat. 17° 56' 8.23" Long. 66° 13' 38.99"

The submerged outfall has a length of five thousand eight hundred (5,800) feet long and a diameter of thirteen (13) feet. The diffuser has one port at the end that is a ten (10) feet restrictor.

- b. The interim mixing zone sampling stations shall be located at the four (4) points described in Part “a” of this special condition.
- c. The background sampling station shall be located one hundred (100) meters from Point 1 or Point 2 of the mixing zone, depending of the current direction at the time of sampling. The petitioner shall determine and submit to EQB the geographic coordinates of both background stations.
- d. The permittee shall maintain records of the equipment used to situate at the mixing zone boundaries. Such records shall include the date when the equipment was obtained or leased, calibration date, serial number, model, etc.

To identify the location of the sampling points of the mixing zone and the background, the permittee shall use the procedure established in the EPA-QA/QC for 301(h) Cocument (Table D-1 Example ZID Boundary Stations Locations).

If the permittee determines to use another method to identify the sampling points of the mixing zone, the permittee shall, prior to the utilization of such method, obtain written approval from EQB.

- e. The IMZ is defined for the following parameter:

Parameter	Daily Maximum Discharge Limitation at Outfall Serial Number 001	Daily Maximum Limitation at the Edge of the IMZ
Temperature (°C)	38.5	32.2

- f. Monitoring samples for this parameter shall be taken at the sampling point 001, the background monitoring station and at the sampling points of the IMZ. The discharge shall comply with the water quality standards at sampling point 001, for all the other substances.
- g. The monitoring samples at the four (4) stations in the boundaries of the IMZ and the background monitoring station shall be taken at three (3) depths in each station: 10%, 50%, 90% of the depth.
- h. Solids from wastewater sources shall not cause deposition in, or be deleterious to the existing or designated uses of the waters.
- i. The discharge shall not cause the growth or propagation of organisms that negatively disturb the ecological equilibrium in the areas adjacent to the mixing zone.
- j. The mixing zone shall be free of debris, scum, floating oil and any other substance that produce objectionable odors.

- k. The permittee shall maintain in good operating conditions the discharge system [discharge outfall (land and submarine), diffuser, ports, etc.]. At least once a year, the discharge system shall be inspected to determine if some repairs, replacing, etc., on the discharge system is required. A report of such inspections shall be submitted to EPA and EQB not later than sixty (60) days after the performance of the inspection.
- l. The EQB can require that the permittee conduct bioaccumulation studies, dye studies, water quality studies or any other pertinent studies. If the EQB require one or more of the aforementioned studies, the permittee will be notified to conduct such study(ies). One hundred and twenty (120) days after the notification of the EQB, the permittee shall submit, for evaluation and approval of the EQB, a protocol to conduct such study(ies). Sixty (60) days after the EQB approval, the permittee shall initiate such study(ies). Ninety (90) days after conducting such study(ies), the permittee shall submit a report that includes the results of such study(ies).
- m. The permittee shall implement a one year monitoring program to obtain the necessary data to validate the IMZ. The monitoring program shall consist of the sampling of the parameters included in Part “e” of this special condition to verify compliance with the applicable provisions of the PRWQSR and a dye study to validate the mathematical model used to determine the critical initial dilution and verify the behavior of the plume within the mixing zone. The monitoring program shall be conducted as follows:
 - i. The permittee shall conduct four (4) sampling events at the four (4) stations at the boundaries of the IMZ, at the background sampling station and at the sampling point of discharge 001, during two seasons (summer and winter). Two sampling events shall be conducted during each season.
 - ii. The dye study shall be conducted twice, one event during each season, the same time as one of the sampling events of the season.
- n. The monitoring program shall commence ninety (90) days after the written approval of the corresponding Protocol and Quality Assurance Project Plan (QAPP). Such Protocol and QAPP shall be submitted to EQB ninety (90) days after the EDP.
- o. If the mathematical model is validated as established in the applicable provisions of the PRWQSR and in the Mixing Zone and Bioassays Guidelines, a final mixing zone authorization will be issued by EQB. Nevertheless, if the mathematical model is not validated, the EQB may revoke the IMZ authorization in accordance with Article 5.14 of the PRWQSR. In such case, the permittee must submit a compliance plan according to Article 5.16 of the PRWQSR.
- p. The EQB can allow that the permittee use alternative methods for the mixing zone validation if such methods comply with the applicable federal and state regulations or when new technology is developed that produce results technically and environmentally more reliable than those produced by the methods described in this special condition.

- q. The EQB will determine if the effluent limitations will be final or if it is necessary to reopen the WQC to modify (increase or decrease) the effluent limitation for the aforementioned parameter after the revision of the results obtained in the studies required in this special condition.
 - r. The authorization for the mixing zone will not be transferable and does not convey any property rights of any sort or any exclusive privileges, nor it authorizes any injury to persons or property or invasion of other private rights, or any infringement of Federal or State laws or regulations.
25. The permittee shall conduct quarterly definitive acute and chronic toxicity tests using the organisms *Mysidopsis bahia*, *Cyprinodon variegatus* and *Arbacia punctulata* for the wastewater discharges identified as 001, 002, 003 and 004.
- a. Thirty (30) days from the EDP, the permittee shall submit, for evaluation and approval by EQB, a protocol to conduct such toxicity tests.

Such protocol shall include, but will not be limited to:
 - i. An identification of the organizations responsible for conducting the tests, including a full description of the laboratory capabilities and personnel expertise and the species to be tested.
 - ii. A detailed description of the methodology to be utilized in the conduct of the tests, including equipment, sample collection, dilution water and source of test organisms.
 - iii. A schematic diagram which depicts the effluent sampling location in relation to the wastewater treatment facility and discharge point 001.
 - b. The toxicity tests shall be conducted quarterly beginning not later than one hundred eighty (180) days from the EDP, for a one (1) year period, after which the tests will be conducted annually.
 - c. The toxicity tests shall be conducted according to the most recent editions of the following publications of the EPA:
 - i. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA-821-R-02-012), Fifth Edition, October 2002, or the most recent edition of this publication, if such edition is available.
 - ii. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA-821-R-02-013), Fourth Edition, October 2002, or the most recent edition of this publication, if such edition is available.
 - d. The procedures, methods, techniques, conditions, etc., included in the above mentioned publications shall be followed at all times. If the permittee determines to use other procedures, methods, etc., because the permitte understands that:
 - i. by the nature or conditions of this case is impossible to follow such publications;

- ii. other procedures, methods, etc., are adequate, then, the permittee shall, prior to the utilization of other procedures, methods, etc., obtain the written approval from the EPA and EQB.
 - e. The effluent samples for the toxicity tests shall be used in or before 36 hours after being collected.
 - f. A report on the toxicity tests conducted shall be submitted to the EQB, during the sixty (60) days period after the tests were conducted. This report shall be prepared according to the aforementioned publications of EPA.
 - g. Based on the review of the test results, the EQB can require additional toxicity tests, including toxicity/treatability studies and can revoke the interim or final mixing zone authorization according with Section 5.14 of the PRWQSR.
26. The permittee shall comply with all the applicable provisions established in the amendment of the Puerto Rico Water Quality Standards Regulation immediately upon the date of effectiveness of such amendment, unless the permittee requests and obtains a Compliance Plan in accordance with the applicable Rules and Regulations.⁵

-
- 1. According to Article 1, Puerto Rico Water Quality Standards Regulation as Amended.
 - 2. According to Article 3, Puerto Rico Water Quality Standards Regulation as Amended.
 - 3. According to Article 5, Puerto Rico Water Quality Standards Regulation as Amended.
 - 4. According to Article 6, Puerto Rico Water Quality Standards Regulation as Amended.
 - 5. According to Article 8, Puerto Rico Water Quality Standards Regulation as Amended.
 - 6. According to the Environmental Public Policy Act of September 22, 2004, Act No. 416, effective since March 22, 2005.
 - 7. According to the Section 405 (d)(4) of the Federal Clean Water Act as Amended (33 U.S.C. 466 et seq.).
 - 8. According to the Code of Federal Regulation Number 40 (40 CFR), Part 131.40, as amended (Federal Register/Volume 69, No. 16/Monday, January 26, 2004).

B. MONITORING AND REPORTING REQUIREMENTS

1. Monitoring and records. See Part II.B.10.
2. Discharge Monitoring Reports.
 - a. See Part II.B.12.d.
 - b. Monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on August 28, 2008. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and State Director at the following addresses:

COMPLIANCE ASSISTANCE
PROGRAM SUPPORT BRANCH
U.S. ENVIRONMENTAL PROTECTION
AGENCY, REGION II
290 BROADWAY - 21ST FLOOR
NEW YORK, NEW YORK 10007-1866

DIRECTOR
CARIBBEAN ENVIRONMENTAL
PROTECTION DIVISION
U.S. ENVIRONMENTAL PROTECTION
AGENCY, REGION II
EDIF CENTRO EUROPA APT 417
1492 AVENIDA PONCE DE LEON
SAN JUAN, PUERTO RICO 00907-4127

ENVIRONMENTAL QUALITY BOARD
OF PUERTO RICO
P.O. BOX 11488
SANTURCE, PUERTO RICO 00910

1. Quality assurance practices. The permittee is required to show the validity of all data by requiring its laboratory to adhere to the following minimum quality assurance practices:
 - a. Duplicate (1) and spiked (2) samples must be run for each constituent analyzed for permit compliance on 5% of the samples, or at least on one sample per month, whichever is greater. If the analysis frequency is less than one sample per month, duplicate and spiked samples must be run for each analysis.
 - b. For spiked samples, a known amount of each constituent is to be added to the discharge sample. The amount of constituent added should be approximately the same amount present in the unspiked sample, or must be approximately that stated as maximum or average in the discharge permit.

c. The data obtained in a. shall be summarized in an annual report submitted at the end of the fourth quarter of reporting in terms of precision, percent recovery, and the number of duplicate and spiked samples run.

i. Duplicate samples are not required for the following parameters: Color, Temperature, Turbidity.

ii. Spiked samples are not required for the following parameters listed in Table 1 of 40 CFR Part 136: Acidity, Alkalinity, Bacteriological, Benzidine, Chlorine, Color, Dissolved Oxygen, Hardness, pH, Oil and Grease, Radiological, Residues, Temperature, Turbidity. Procedures for spiking samples and spiked sample requirements for parameters not listed on the above-referenced table are available through EPA's Regional Quality Assurance Coordinator.

2. Precision for each parameter shall be calculated by the formula, standard deviation is

$s = (\sum d^2 / 2K)^{1/2}$, where d is the difference between duplicate results, and k is the number of duplicate pairs used in the calculation.

3. Percent recovery for each parameter shall be calculated by the formula $R = 100 (F-I)/A$, where F is the analytical result of the spiked sample, I is the result before spiking of the sample, and A is the amount of constituent added to the sample.

4. The percent recovery, R, for each parameter in e. above shall be summarized yearly in terms of mean percent recovery and standard deviation from the mean. The formula,

$s = (\sum (x_i - \bar{x})^2 / (n - 1))^{1/2}$, where "s" is constituent added to the sample.

5. The permittee or his contract laboratory is required to annually analyze an external quality control reference sample for each pollutant. These are available through the Regional Quality Assurance Coordinator, Region II, U.S. Environmental Protection Agency, Edison Environmental Laboratory, Edison, New Jersey 08817.

6. The permittee and/or his contract laboratory is required to maintain records of the specific analytical methods used, including options employed, if any, within a particular method, and of reagent standardization and equipment calibration operations.

7. If a contract laboratory is utilized, the permittee shall submit the name and address of the laboratory and the parameters analyzed at the time it submits its discharge monitoring reports (see Section 2.b above). Any change in the contract laboratory being used or the parameters analyzed shall be reported prior to or together with the monitoring report covering the period during which the change was made.

8. Twenty-four hour reporting.

The permittee must report violations of maximum daily discharge limitations in accordance with the reporting requirements set forth in Part II.B.12.f. (24 hour reporting followed by 5 day written submission).

Not Applicable.

9. Additional reporting requirements. The permittee shall notify the Regional Administrator and State Director as soon as it knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest (except as specified in part (4)) of the following "notification levels":
- b. One hundred micrograms per liter (100 µg/l);
 - i. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - ii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iii. The notification levels, if any, established by the Director in the permit.
- c. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/l);
 - ii. One milligram per liter (1 mg/l) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The notification levels, if any, established by the Director in the permit.

C. ADDITIONAL REQUIREMENTS

1. Section 316 (b) Requirements

As required by Section 316(b) of the Clean Water Act (CWA 316(b)), the location, design, construction, and capacity of the cooling water intake structures for the permittee's facility shall reflect the "best technology available for minimizing adverse environmental impact" (BTA).

Based on the intake study submitted by PREPA entitled *Impingement Mortality and Entrainment Characterization Study and Current Status Report: PREPA Aguirre Power Plant Complex* on January 30, 2008, (referred herein as "Aguirre Study"), a review of site-specific factors at the facility and other relevant information, EPA Region II has determined that, at this time, the BTA for this facility shall be the current control measures employed at the Aguirre Power Plant Complex, as well as adherence to the permit conditions and schedule of compliance listed below:

a. Performance Standards

By the expiration of this permit, the permittee must select, implement and/or install technologies and operational measures to meet the following performance standards:

- i. Impingement Mortality Performance Standard - Reduce fish and shellfish impingement mortality by a minimum of 80% from the calculation baseline.
- ii. Entrainment Performance Standard - Reduce fish and shellfish impingement mortality by a minimum of 60% from the calculation baseline.

b. Selection of Control Measures to Reduce Entrainment and Impingement Mortality

- i. By **EDP + 1 year**, the permittee must submit to EPA a plan for modifications to the facility to include an appropriate fish return system. Such modifications must include the addition of a gently sloped, smooth surface, fish return discharging underwater.
- ii. By **EDP + 1 year**, the permittee must submit an evaluation of possible changes in operation and maintenance practices/procedures for the intake structure that could lead to further reductions in impingement mortality and/or entrainment. This evaluation shall include an assessment of the feasibility of reducing impingement mortality by modifying the screen/screen wash system (such as modifying the frequency of screen rotation and cleaning, changing the screen coating, and/or reducing the screen wash pressure, and improving the effectiveness of the fish return system).

- iii. The permittee shall utilize the existing closed-cycle cooling system to the maximum extent practicable to reduce the flow required through the intake structure.
- iv. The permittee shall utilize the five intake screens to the maximum extent possible to keep the intake velocity at a minimum level.
- c. The permittee shall implement the controls outlined in the evaluation by **EDP + 2 years**.
- d. By **EDP + 4.5 years**, as an attachment to the NPDES Permit Renewal Application, the permittee must submit a detailed analysis of the cumulative reductions in entrainment and impingement mortality achieved since EDP.
- e. Pursuant to 40 CFR 122.62, should EPA determine that the currently implemented technologies and other measures do not reflect BTA, EPA may reopen and modify this permit to include a CWA 316(b) schedule of compliance, which may include, but will not necessarily be limited to proposed design and construction technologies and/or operational measures identified by the permittee. EPA may also reopen and modify this permit to comply with requirements of new regulations, standards, or judicial decisions relating to CWA 316(b).

2. Chemical and Material Usage

- a. The permittee is permitted to use chemicals to control biofouling in the service cooling towers, or for fire protection foam, provided that they meet the following conditions:
- b. The discharge shall not cause a violation of any permit limit or cause or contribute to an exceedance of any applicable water quality standard for the receiving water.
- c. Notification to EPA of the optimum product dosage necessary to ensure no deleterious effects to the effluent aquatic toxicity. PREPA shall also document that adequate process controls are in place to ensure that excessive levels of the chemical products are not subsequently discharged.
- d. EPA may request that PREPA perform toxicity testing of the outfall discharges, or pilot test waste streams, to ensure that the use of chemicals does not contribute to effluent toxicity.
- e. The discharge of plastic pellets or rockets utilized in the Continuous On-line Mechanical Condenser Cleaning System shall be prohibited from outfalls 001, 002, 003, 004, and 005.

3. Procedures for Pilot Testing and Use of Chemicals and Materials

- a. The permittee shall conduct a pilot test of all new materials or chemicals to be used within the plant operations that may affect the quality of the effluent discharge.
- b. The permittee shall notify EPA by letter of a planned pilot test at least sixty (60) days in advance of planned pilot tests of new chemicals or materials within the plant operations. The letter shall include the product name and material safety data sheets (MSDS), as well a brief description of the purpose, timing, and location of the pilot test.
- c. The testing or use of such chemicals and/or materials shall not cause a violation of any permit limit or cause or contribute to an exceedance of any applicable water quality standard for the receiving water.
- d. At the time of the pilot test, the permittee shall take a grab sample of the effluent from the outfall to which the material or chemical discharges, and analyze for all parameters monitored as required by the NPDES permit in effect at the time of the pilot test. The analytical testing must be representative of the condition of the normal outfall discharge with the addition of the material or chemical being tested. The permittee shall report on the timing of the test and sample location in the report required under Item C.2.f of this condition.
- e. The permittee shall perform an acute whole effluent toxicity (WET) test of the effluent sampled at the monitoring station where the chemical or material is discharged. The acute toxicity analysis shall be performed on a grab sample of the effluent containing the material or chemical. The pilot test shall be stopped if toxicity is observed in the sample. For the purposes of this test, an LC50 result of $\leq 100\%$ shall be considered an indicator of toxicity.
- f. The permittee shall provide a report of the pilot test to EPA within 30 days of completion of the test. The report shall include:
 - i. The time, duration, amount and location of each dosage of chemical or material tested;
 - ii. Documentation that adequate process controls were in place to ensure that excessive levels of the chemical or material were not subsequently discharged;
 - iii. The optimum product dosage necessary to ensure no deleterious effects to the effluent aquatic toxicity;

- iv. Results of all analytical testing, including the testing of the discharge for parameters limited by this permit, as well as the results of the acute toxicity testing.
- v. A description of future plans for use of the material or chemical tested.
- vi. All reports shall be provided to EPA within 30 days of the completion of the pilot test, to the following address:

CHIEF, CLEAN WATER REGULATORY BRANCH
U.S. EPA REGION II
290 BROADWAY
NEW YORK, NEW YORK 10007

- g. The permittee may consider the use of a tested chemical or material conditionally approved as of 60 days following the completion of a pilot test, provided that all permit limitations and conditions are met. The use of this chemical will be considered conditionally approved unless and until EPA provides notification to the permittee that the use of the tested chemical or material will be prohibited or controlled due to potential to cause an exceedance of permit limitations or toxicity. EPA reserves the right to prohibit the use of a chemical material at any time.

4. Fire Protection Foam

The permittee shall use best management practices to prevent the discharge of fire protection foam to the maximum extent practicable

5. Requirement to Maintain Treatment Level

The permittee is required to maintain at least the same level of treatment as in the previous permit for the discharges from outfalls 001, 002, 003, 004, and 005.

6. Reopener Clause for Endangered Species Protection

This permit may be modified or revoked and reissued based on the results of Endangered Species Act (ESA) Section 7 consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

7. Reopener Clause for Essential Fish Habitat Protection

This permit may be modified or revoked and reissued based on the results of coordination with National Marine Fisheries Service regarding essential fish habitats (EFH) pursuant to Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act.

8. Reopener Clause for Coastal Zone Management Consistency

This permit may be modified or revoked and reissued based on conditions required by the Puerto Rico Planning Board as part of a determination of consistency with the State Coastal Zone Management program.

A. DEFINITIONS

1. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
2. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
3. "Bypass" means the intentional diversion of wastes from any portion of a treatment facility.
4. "Composite" means a combination of individual (or continuously taken) samples obtained at regular intervals over the entire discharge day. The volume of each sample shall be proportional to the discharge flow rate. For a continuous discharge, a minimum of 24 individual grab samples (at hourly intervals) shall be collected and combined to constitute a 24 hour composite sample. For intermittent discharges of more than four (4) hours duration, grab samples shall be taken at a minimum of 30 minute intervals.
5. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24 hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharge over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of pollutant over the day. For purposes of sampling, "daily" means an operating day or 24 hour period.
6. "Director" means the "Regional Administrator" or the "State Director", as the context requires, or an authorized representative. Until the State has an approved State program authorized by EPA under 40 C.F.R. Part 123, "Director" means the Regional Administrator. When there is an approved State program, "Director" normally means the State Director. Even in such circumstances, EPA may retain authority to take certain action (see, for example, 40 C.F.R. 123.1(d), 45 Federal Register 14178, April 1, 1983, on the retention of jurisdiction over permits EPA issued before program approval). If any condition of this permit requires the reporting of information or other actions to both the Regional Administrator and the State Director, regardless of who has permit issuing authority, the terms "Regional Administrator" and "State Director" will be used in place of "Director".
7. "Discharge Monitoring Report" or "DMR" means the EPA uniform national form, including any subsequent additions, revisions, or modifications, for the reporting of self monitoring results by permittees.
8. "Grab" means an individual sample collected in less than 15 minutes.

9. "Gross" means the weight or the concentration contained in the discharge. (Unless a limitation is specified as a net limitation, the limitation contained in this permit is a gross limitation).
10. "Maximum daily discharge limitation" means the highest allowable "daily discharge".
11. "Monthly" means one day each month (the same day each month) and a normal operating day (e.g., the 2nd Tuesday of each month).
12. "Net" means the amount of a pollutant contained in the discharge measured in appropriate units as specified herein, less the amount of a pollutant contained in the surface water body intake source, measured in the same units, over the same period of time, provided:
 - a. The intake water source must be drawn for the same body of water into which the discharge is made; and
 - b. In cases where the surface water body intake source is pretreated for the removal of pollutants, the intake level of a pollutant to be used in calculating the net is that level contained after the pretreatment steps.
13. "Regional Administrator" means the Regional Administrator of Region II of EPA or the authorized representative of the Regional Administrator.
14. "Severe property damage" means that substantial physical damage to the treatment facilities which would cause 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.
15. "State Director" means the chief administrative officer of the State water pollution control agency, or the authorized representative of the State Director.
16. "Toxic pollutant" means any of the pollutants listed in 40 CFR 401.15 (45 F.R. 44503, July 30, 1979) and any modification to that list in accordance with Section 307 (a)(1) of the Clean Water Act.
17. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
18. "Weekly" means every seventh day (the same day of each week) and a normal operating day.

B. GENERAL CONDITIONS

1. Duty to Comply.

- a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- c. The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405, of the Clean Water Act is subject to a civil penalty not to exceed \$37,500.00 per day for each violation. Any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine not less than \$2,500 nor more than \$37,500.00 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates permit conditions implementing section 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

2. Duty to Reapply. This permit and the authorization to discharge shall terminate on the expiration date indicated on the first page. In order to receive authorization to discharge after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permit issuing authority remains EPA, the permittee shall complete, sign, and submit an application to the Regional Administrator no later than 180 days before the expiration date.
3. Need to Halt or Reduce not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back up or auxiliary facilities or similar systems, installed by the permittee, when the operation is necessary to achieve compliance with the conditions of the permit.
6. Permit actions.
 - a. This permit may be modified, revoked and reissued, or terminated during its term for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
 - b. Causes for modification, revocation and reissuance, and termination are set forth in 40 C.F.R. 122.62 and 122.64.
 - (1) Specified causes for modification, revocation and reissuance, and termination include:
 - (a) Noncompliance by the permittee with any condition of the permit;
 - (b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
 - (c) A determination that the permitted discharge endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
 - (d) There is a change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit.
 - (2) Specified causes for modification and, upon request or agreement of the permittee, revocation and reissuance of the permit include material and substantial alterations or additions to the permittee's operation which occurred after permit issuance and which justify the application of permit conditions that are different or absent from this permit, (e.g., production changes, relocation or combination of discharge points, changes in the nature or mix of products produced) provided the reconstruction activities do not cause the new source permit issuance provisions of 40 C.F.R. 122.29 to be applicable.

- c. With the exception of permit modifications which satisfy the criteria in 40 C.F.R. 122.63 for "minor modifications," the applicable procedures required by 40 C.F.R. Part 124, including notice and opportunity for a hearing, shall be followed before this permit is modified, revoked and reissued, or terminated.
- 7. Property rights. The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local laws or regulations.
 - 8. Duty to provide information. The permittee shall furnish to the Director within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
 - 9. Inspection and Entry. The permittee shall allow the Regional Administrator, the head of the State water pollution control agency, or any other authorized representative(s), upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
 - 10. Monitoring and records.
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, for a period of at least 3 years from the date of the sample, measurement report or application. This period may be extended by request of the Director at any time.
 - c. Records of monitoring information shall include:

- (1) The date, exact place, and time of sampling or measurement;
- (2) The individual(s) who performed the sampling or measurements;
- (3) The date(s) analyses were performed;
- (4) The individual(s) who performed the analyses;
- (5) The analytical techniques or methods used;
- (6) The quality assurance information specified in Part I of this permit; and
- (7) The results of such analyses.

- d. Monitoring shall be conducted according to test procedures approved under 40 C.F.R. Part 136.
- e. The Clean Water Act provides that any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both.

11. Signatory requirements.

- a. All permit applications shall be signed as follows
 - (1) For a corporation, by a responsible corporate officer; or
 - (2) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal or other public agency, by either a principal executive officer or ranking elected official.
- b. All reports required by this permit, and other information requested by the Regional Administrator or State Director pursuant to the terms of this permit, including DMRs and reports of noncompliance, shall be signed as follows:
 - (1) By a person described in subsection a. or by a duly authorized representative of that person.
 - (2) A person is a duly authorized representative only if:

- (a) The authorization is made in writing by a person described on subsection a.;
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.
 - (c) The written authorization is submitted to the Regional Administrator, U.S. Environmental Protection Agency, Region II, 290 Broadway, New York, New York, 10007-1866, Attention: Compliance Assistance Program Support Branch, and to the State Director.
- (3) If a written authorization submitted pursuant to subsection b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. must be submitted to the Regional Administrator and State Director prior to or together with any reports or information to be signed by an authorized representative.
- c. Certification. Any person signing a document under subsection a. or b. shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- d. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both.

12. Reporting Requirements.

- a. Planned changes. The permittee shall give notice to the Regional Administrator and State Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a "new source" in 40 C.F.R 122.29(b);
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part I.B.5, above; or
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Anticipated noncompliance. The permittee shall give advance notice to the Regional Administrator and State Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements as soon as it becomes aware of the circumstances.
- c. Transfers.
 - (1) This permit is not transferable to any person except after notice to the Regional Administrator and State Director. Except as provided in paragraph (2), a permit may be transferred by the existing permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (2) This permit may be automatically transferred to a new permittee if:
 - a) The existing permittee notifies the Regional Administrator and State Director at least 30 days in advance of the proposed transfer date in subparagraph (b);
 - (b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

- (c) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. (A modification under this subparagraph may also be a minor modification under 40 C.F.R. 122.63.) If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in subparagraph (b).
 - (3) If this permit is automatically transferred in accordance with the provisions of paragraph (2), the permit may be modified to reflect the automatic transfer after its effective date.
- d. Monitoring reports.
 - (1) Monitoring results shall be reported at the intervals specified in Part I of this permit.
 - (2) Monitoring results shall be reported on a Discharge Monitoring Report (DMR).
 - (3) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 C.F.R. 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - (4) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
- e. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- f. Twenty four hour reporting.
 - (1) The following information shall be reported orally to the Regional Administrator at (732) 548 8730 and State Director within 24 hours from the time the permittee becomes aware of the circumstances:
 - (a) Any noncompliance which may endanger health or the environment;
 - (b) Any unanticipated bypass (see 13 below) which violates any effluent limitation in the permit;
 - (c) Any upset (see 14 below) which violates any effluent limitation in the permit; or

- (d) The violation of a maximum daily discharge limitation for any of the pollutants listed in Part I of this permit is required to be reported within 24 hours. This list includes any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance.
 - (2) In addition to the oral 24 hour report, the permittee shall also provide a written submission to the Regional Administrator and State Director within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - (3) Except with respect to written reports required under paragraph (1)(a) of subsection f., above, the Director may waive the written report on a case by case basis if the oral report has been received within twenty four hours.
- g. Other noncompliance. The permittee shall report to the Regional Administrator and State Director all instances of noncompliance not reported under subsections d, e, and f at the time the monitoring report covering the period of noncompliance is submitted. The reports shall contain the information listed in paragraph (2) of subsection f., above.
- h. 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 Regional Administrator and State Director, it shall promptly submit such facts or information to the Regional Administrator and State Director.

13. Bypassing

- a. Bypass not violating limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of subsections b. and c.
- b. Notice.
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in subsection f. of section 12 above.

c. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of unheated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or maintenance; and
 - (c) The permittee submitted notices as required under subsection b.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (1).

14. Upset.

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of subsection b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in subsection f. of section 12 above; and

- (4) The permittee complied with any remedial measures required under section 4 above (duty to mitigate).
- c. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- 15. Removed substances. Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters and/or the treatment of intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. The following data shall be reported together with the monitoring data required in Part I, B.2.:
 - a. The sources of the materials to be disposed of;
 - b. The approximate volumes and weights;
 - c. The method by which they were removed and transported; and
 - d. Their final disposal locations.
- 16. Oil and hazardous substance liability. The imposition of responsibilities upon, or the institution of any legal action against the permittee under Section 311 of the Act shall be in conformance with regulations promulgated pursuant to Section 311 to discharges from facilities with NPDES permits.
- 17. Reopener clause for toxic effluent limitations. Notwithstanding any other condition of this permit, if any applicable toxic effluent standard or prohibition is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, this permit shall be promptly modified or revoked and reissued to conform to that effluent standard or prohibition.
- 18. State laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act. The issuance of this permit does not preempt any duty to obtain State or local assent required by law for the discharge.
- 19. Availability of information.
 - a. NPDES permits, effluent data, and information required by NPDES application forms provided by the Director under 40 C.F.R. 122.21 (including information submitted on the forms themselves and any attachments used to supply information required by the forms) shall be available for public inspection at the offices of the Regional Administrator and State Director.

- b. In addition to the information set forth in subsection a., any other information submitted to EPA in accordance with the conditions of this permit shall be made available to the public without further notice unless a claim of business confidentiality is asserted at the time of submission in accordance with the procedures in 40 C.F.R. Part 2 (Public Information).
 - c. If a claim of confidentiality is made for information other than that enumerated in subsection a., that information shall be treated in accordance with the procedures in 40 C.F.R. Part 2. Only information determined to be confidential under those procedures shall not be made available by EPA for public inspection.
20. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- C. EFFECTIVENESS OF PERMIT
- 1. This permit shall become effective in its entirety on the date indicated on the first page of this permit unless a petition has been filed with the Environmental Appeals Board to review any condition of the permit decision pursuant to the provisions of 40 CFR Part 124.19. All contested conditions and any uncontested condition(s) that are inseverable from the contested conditions shall be stayed. All other conditions shall become effective thirty (30) days after the date of the notification specified in 40 CFR 124.16(a)(2)(ii).
 - 2. For purposes of judicial review under Section 509(b) of the Clean Water Act, final agency action on a permit does not occur unless and until a party has exhausted its administrative remedies under 40 CFR 124. Any party which neglects or fails to seek review under 40 CFR 124.19, thereby waives its opportunity to exhaust available agency administrative remedies.