PERMIT NO. 01908
(corresponds to
NPDES PERMIT NO. TX0064947)
This permit supersedes and replaces Permit No. 01908 approved August 20, 1985.

TEXAS WATER COMMISSION
Stephen F. Austin State Office Building
1700 N. Congress Ave.
Austin, Texas 78711

PERMIT TO DISPOSE OF WASTES
under provisions of Chapter 26
of the Texas Water Code

Houston Lighting and Power Company

whose mailing address is

P.O. Box 1700
Houston, Texas 77251

is authorized to treat and dispose of wastes from the South Texas Project Electric Generating Station (SIC 4911)

located approximately 10 miles north of Matagorda Bay and 12 miles south-southwest of the City of Bay City, Matagorda County, Texas

to the Colorado River in Segment No. 1401 of the Colorado River Basin

only in accordance with effluent limitations, monitoring requirements and other conditions set forth herein, as well as the rules of the Texas Water Commission ("Commission"), the laws of the State of Texas, and other orders of the Commission. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the herein described discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the herein described discharge route.

This permit and the authorization contained herein shall expire at midnight, five years after the date of Commission approval.

APPROVED, ISSUED AND EFFECTIVE this 2nd day of October, 1991.

ATTEST: Gloria A. Vasquez John Hall
For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number(s) 001

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge from the cooling pond subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 144.0 million gallons per day (MGD). The total volume discharged during any 24-hour period shall not exceed 200.0 million gallons.

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow (MGD) (*6)	(Report)	(Report)	N/A	Continuous (*1)	Record
Colorado River Flow (MGD) (*6)	N/A	(Report)	N/A	1/day (*1)	Estimate
Temperature - Degrees F	95 (*2)	97 (*2)	N/A	Continuous (*1)	In Situ
Total Residual Chlorine (*3)	N/A	No Detectable Quantity (*4)	N/A	1/week (*1)	Grab (*5)

(*1) When discharge occurs from Outfall 001.
River flow monitoring required 1/day for each day that a discharge from Outfall 001 occurs. River flow monitoring required only when discharging from Outfall 001.
(*2) See Other Requirements, paragraph 6.
(*3) See Other Requirements, paragraph 7.
(*4) The Practical Quantitation Level (PQL) is 0.05 mg/l
(*5) Samples shall be representative of periods of chlorination.
(*6) See Other Requirements, paragraph 3.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day, by grab sample. (*1)

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

4. Effluent monitoring samples shall be taken at the following location(s):At Outfall 001, which is at a convenient point in the blowdown line prior to entering the Colorado River.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number(s) 101

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge low volume wastewater (*1) commingled with previously monitored effluents (PME) [neutralization basin discharge] subject to the following effluent limitations:

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Measurement Frequency	Daily Max. Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day	Estimate
Total Suspended Solids	30	100 (*2)	100	1/week	Grab (*3)
Oil and Grease	15	20 (*2)	20	1/week	Grab (*3)

(*1) See Other Requirements, paragraph 8.
(*2) Instantaneous Maximum.
(*3) If more than one source is associated with this particular waste category, grab samples from each source shall be analyzed and the analytical values combined on a flow weighted basis with the calculated values used to determine the Daily Average for the month. The highest analytical value of all grab samples for the monthly reporting period shall be reported as the Daily Maximum.

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

3. Effluent monitoring samples shall be taken at the following location(s): At sample point 101 where low volume wastewater (*1) commingled with previously monitored effluents (PME) are discharged from the treatment facility prior to mixing with any other wastestream.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number(s) 201

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge low volume wastewater (*1) [Oily Waste Treatment System] subject to the following effluent limitations:

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Measurement Frequency	Daily Max. Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day	Estimate
Total Suspended Solids	30	100 (*2)	100	1/week	Grab (*3)
Oil and Grease	15	20 (*2)	20	1/week	Grab (*3)

(*1) See Other Requirements, paragraph 8.
(*2) Instantaneous Maximum.
(*3) If more than one source is associated with this particular waste category, grab samples from each source shall be analyzed and the analytical values combined on a flow weighted basis with the calculated values used to determine the Daily Average for the month. The highest analytical value of all grab samples for the monthly reporting period shall be reported as the Daily Maximum.

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

3. Effluent monitoring samples shall be taken at the following location(s): At sample point 201 where low volume wastewater is discharged from the Oily Waste Treatment System prior to mixing with any other wastestream.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number(s) 301, 401 and 601

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge treated sanitary sewage effluent- East Side Facility (301), treated sanitary sewage effluent- West Side Facility (401) and treated sanitary sewage effluent- Training Area Facility (601) subject to the following effluent limitations:

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Measurement Frequency	Daily Max. Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day	Estimate
Biochemical Oxygen Demand - 5 day	20	45 (*1)	45	1/week	Grab
Total Suspended Solids	20	45 (*1)	45	1/week	Grab

(*1) Instantaneous Maximum.

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

3. Effluent monitoring samples shall be taken at the following location(s): At Outfall 301 where treated sanitary sewage effluent is discharged from the sewage treatment plant prior to mixing with any other waste stream; At Outfall 401 where treated sanitary sewage effluent is discharged from the sewage treatment plant prior to mixing with any other waste stream; and at Outfall 601 where treated sanitary sewage effluent is discharged from the sewage treatment plant prior to mixing with any other waste stream

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number(s) 501

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge metal cleaning wastes (*1) subject to the following effluent limitations:

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Measurement Frequency	Daily Max. Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/day (*3)	Estimate
Iron, Total	1.0	1.0 (*2)	1.0	1/week (*3)	Grab
Copper, Total	0.5	1.0 (*2)	1.0	1/week (*3)	Grab

(*1) See Other Requirements, paragraph 9.
(*2) Instantaneous Maximum.
(*3) When discharging.

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

3. Effluent monitoring samples shall be taken at the following location(s): At Outfall 501, where metal cleaning wastes are discharged prior to mixing with any other waste stream

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number(s) 002

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge treated sanitary sewage effluent- North Side Plant subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.060 million gallons per day (MGD). The total volume discharged during any 24-hour period shall not exceed 0.120 million gallons.

Effluent Characteristic	Discharge Limitations				Minimum Self-Monitoring Requirements	
	Daily Avg (Lbs/day)	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Measurement Frequency	Daily Max. Sample Type
Flow (MGD)	(Report)		(Report)	N/A	1/day	Estimate
Biochemical Oxygen Demand - 5 Day	(10)	20	45 (*1)	45	1/week	Grab
Total Suspended Solids	(10)	20	45 (*1)	45	1/week	Grab

This waste stream shall be chlorinated sufficiently to maintain at least a 1.0 mg/l chlorine residual after at least 20 minutes contact time based on peak flow and shall not exceed a 4.0 mg/l chlorine residual and shall be monitored 2/week by grab sample. Alternate disinfection methods may be used upon prior approval by the permitting authority.

(*1) Instantaneous Maximum.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week, by grab sample.

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

4. Effluent monitoring samples shall be taken at the following location(s): At Outfall 002, where the North Side Sewage Treatment Plant discharges prior to mixing with any other waste stream.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 31 Texas Administrative Code (TAC) Chapter 305 certain regulations appear as standard conditions in waste discharge permits. All definitions contained in Section 26.001 of the Texas Water Code shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

   a. Daily average flow - the arithmetic average of all determinations of the daily discharge within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily discharge, the determination shall be the average of all instantaneous measurements taken during a 24-hour period or during the period of daily discharge if less than 24 hours. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

   b. Instantaneous flow - the measured flow during the minimum time required to operate the flow measuring device.

   c. 2-hour peak (domestic wastewater treatment plants) - the maximum flow sustained for a two hour period during the period of daily discharge. Multiple measurements of instantaneous maximum flow within a two-hour period may be compared to the permitted 2-hour peak flow.

   d. Daily maximum flow - the highest total flow permitted for a 24-hour period.

2. Concentration Measurements

   a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements. (i) For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration. (ii) For all other wastewater treatment plants - When four samples are not available in calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

   b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab, within a period of one calendar week, consisting of at least three separate measurements.

   c. Daily maximum concentration - the maximum concentration measured on a single day (by composite sample).

   d. Fecal Coliform bacteria-the number of colonies per 100 milliliters effluent.

3. Sample Type

   a. Composite sample - a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow collected no closer than two hours; or a sample continuously collected, proportional to flow, in a continuous 24-hour period or during the period of daily discharge if less than 24 hours.

   b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - Wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of municipal sewage, industrial wastes, agricultural wastes, recreational wastes or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sludge" shall mean the solids and precipitates separated from wastewater by unit processes, which are not regulated as hazardous waste.

MONITORING AND REPORTING

1. Self-Reporting

   31 TAC §305.125(17) Monitoring results shall be provided at the intervals specified in the permit.

   Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 31 TAC §§319.4-319.7.

   Unless otherwise specified, a monthly effluent report must be submitted each month by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Knowingly making any false statement on any such report may result in the imposition of criminal and/or civil penalties as provided by State law.

2. Test Procedures

Test procedures for the analysis of pollutants shall comply with procedures specified in 31 TA §§319.10-319.11. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

3. Records of Results

31 TAC §305.125(11) Monitoring and reporting requirements are as follows:

(a) Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

(b) Monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by the permit, and the certification required by 40 Code of Federal Regulations §264.73(b)(9) shall be retained at the facility site for a period of three years from the date of the record or sample, measurement, report, or certification. This period may be extended at the request of the executive director.

(c) Records of monitoring activities shall include the following:

(i) date, time and place of sample or measurement;
(ii) identity of individual who collected the sample or made the measurement;
(iii) date of analysis;
(iv) identity of the individual and laboratory who performed the analysis;
(v) the technique or method of analysis; and
(vi) the results of the analysis or measurement.

The period during which records are required to be kept shall be automatically extended to and through the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, the results of such monitoring that indicate permit noncompliance shall be included in the calculation and reporting of the value submitted on the required monthly effluent report. The results of such monitoring that indicate permit compliance may also be reported and included in calculations. Increased frequency of sampling shall be indicated on the report.

5. Calibration of Instruments

All automatic flow measuring and/or recording devices and/or totalizing meters required by the permit for measuring permit limited flows shall be accurately calibrated by a trained person at plant startup and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be kept at the plant site for at least three years.

6. Compliance Schedule Reports

31 TAC §305.125(18) Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date.

7. Noncompliance Notification

a. 31 TAC §305.125(9) Unless specified otherwise, the permittee shall report any noncompliance to the executive director which may endanger human health or safety, or the environment. Report of such information shall be provided orally within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission of such information shall also be provided within five working days of the time the permittee becomes aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; 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, and to mitigate its adverse effects.

b. Any noncompliance which is 40% over the permitted effluent limitation shall be reported orally within 24 hours and in writing to the District Office within 5 working days of becoming aware of the condition.

c. 31 TAC §305.125(12) Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the executive director as promptly as possible. (This requirement means to report these types of noncompliance on the monthly self-report form)

8. Signatories To Reports

31 TAC §305.125(14) All reports and other information requested by the executive director shall be signed by the person and in the manner required by 31 TAC §305.128 (relating to Signatories to Reports).

PERMIT CONDITIONS

1. General

   a. 31 TAC §305.125(15) Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the executive director, it shall promptly submit such facts or information.

   b. This permit is granted on the basis of the information supplied and representations made by the permittee during the application process and in reliance upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part in accordance with 31 TAC 305.61-305.68, during its term for cause including, but not limited to, the following:

      (i) Violation of any terms or conditions of this permit;

      (ii) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

      (iii) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   c. 31 TAC §305.125(6) The permittee shall furnish to the executive director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking or, suspending, or terminating the permit. The permittee shall also furnish to the executive director, upon request, copies of records required to be kept by the permit.

2. Compliance

   a. 31 TAC §305.124 Acceptance of the permit by the person to whom it is issued constitutes an acknowledgement and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the commission.

   b. 31 TAC §305.125(1) The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Solid Waste Disposal Act, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or of an application for a permit for another facility.

   c. 31 TAC §305.125(3) 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 the permit.

   d. 31 TAC §305.125(4) The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

   e. 31 TAC §305.125(8) Authorization from the commission is required before beginning any change in the permitted facility or activity that would result in noncompliance with other permit requirements.

   f. 31 TAC §305.125(15) A permit may be amended, suspended and reissued, or revoked for cause. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

   g. There shall be no unauthorized bypasses of wastewater. For purposes of this permit a bypass is considered the discharge of untreated or partially treated wastewater which exceeds the permit limits and is not caused solely by an act of God. Routing wastewater around a treatment unit or units resulting in a discharge which does not exceed permit limits is not a bypass. In the event that a discharge of partially or untreated wastewater is anticipated to cause a violation of permit limits application shall be submitted to the Commission for authorization to discharge untreated or partially treated wastewater pursuant to Section 26.0191 of the Texas Water Code and 31 TAC 305.21-305.30.

3. Inspections and Entry

   a. 31 TAC §305.125(10) Inspection and entry shall be allowed as prescribed in the Texas Water Code, Chapters 26, 27 and 28, and the Texas Solid Waste Disposal Act, Texas Civil Statutes, Article 4477-7, §7.

   b. The members of the commission and employees and agents of the commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state. Members, employees, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, or agent is refused the right to enter in or on public or private property under this authority, the executive director may invoke the remedies authorized in Texas Water Code Section 26.123.

4. Permit amendment

a. 31 TAC §305.125(7) The permittee shall give notice to the executive director prior to making alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements.

b. Prior to any facility modifications, additions and/or expansions of a permitted facility that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

c. 31 TAC §305.125(2) The permittee must apply for an amendment or renewal prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. Authorization to continue such activity will terminate upon the effective denial of said application.

d. Prior to accepting wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

e. Texas Water Code §26.029(b) After a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, to conform to new or additional conditions. The Commission shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Commission may grant additional time.

5. Permit Transfer

a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified, in writing, of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Permit Application Unit in the Water Quality Division.

b. 31 TAC §305.125(13) A permit may be transferred only according to the provisions of 31 TAC §305.64 (relating to Transfer of Permits) and 31 TAC 305.97 (relating to Action on Application for Transfer).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous solid waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Solid Waste Disposal Act, Article 4477-7, Vernon's Annotated Texas Civil Statutes.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to the waters in the state must be specifically authorized in this permit and may require a permit pursuant to Chapter 11 of the Texas Water Code.

8. Property Rights

31 TAC §305.125(16) A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

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

OPERATIONAL REQUIREMENTS

1. 31 TAC §305.125(5) 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 the permit.

2. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all provisions of 31 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals, and upon request of the executive director, the permittee shall take samples of the final effluent and provide proper analysis of such samples in order to demonstrate compliance with these rules.

3. In accordance with 31 TAC §335.6:

a. The permittee shall notify the Executive Director in writing of any closure activity or facility expansion at least 90 days prior to conducting such activity.

b. Closure activities include those associated with any pit, pond, lagoon, or surface impoundment regulated by this permit.

4. The permittee is responsible for installing prior to plant startup, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or a means by which effluent flow may be determined based upon influent measuring.

6. The permittee shall remit an annual waste treatment inspection fee to the Commission as required by 31 TAC 305 (Subchapter R). Failure to pay this fee may result in revocation of this permit.

7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification, upon the same basis as self-monitoring data are required to be kept and made available.

OTHER REQUIREMENTS

1. Rainfall runoff discharged from any point source from the plant area not identifiable by outfall shall not: (a) contain floating solids, visible oil or visible foam in other than trace amounts, (b) have a pH less than 6.0 nor greater than 9.0 standard units at any time, or (c) exceed a chemical oxygen demand of 200 mg/l nor an oil and grease concentration of 15 mg/l on a grab sample. This provision applies to plant drainage ditches and include plant site dewatering and/or fire training water discharges which discharge to waters in the State.

2. Discharges from sources such as reservoir relief wells, reservoir spillway gate leakage, condenser box drainage and any ground water monitoring wells are authorized. These sources may discharge to the Colorado River, to the West Branch of the Colorado River, to Little Robbins Slough and the East Fork of Little Robbins Slough.

3. For Outfall 001, the discharge from the cooling pond shall not exceed 12.5 % of the net flow of the Colorado River at the discharge point and there shall be no discharge from Outfall 001 when the receiving water flow adjacent to the plant site is less than 800 cubic feet/second.

4. The sampling locations for all Outfalls shall be chosen (and constructed) by the company after discussion and mutual agreement between the company and the TWC District Office personnel.

5. There shall be no discharge of polychlorinated biphenyl transformer fluid.

6. Daily average temperature is defined as the flow weighted average temperature (FWAT) and shall be computed and recorded on a daily basis. FWAT shall be computed at equal time intervals not greater than two hours. The method of calculating FWAT is as follows:

$$\text{FWAT} = \frac{\text{SUMMATION (INSTANTANEOUS FLOW X INSTANTANEOUS TEMPERATURE)}}{\text{SUMMATION (INSTANTANEOUS FLOW)}}$$

"Daily average temperature shall be the arithmetic average of all FWAT's calculated during the calendar month.

"Daily maximum temperature (also known as the maximum daily value) shall be the highest FWAT calculated during the calendar month.

7. The term "total residual chlorine" (or total residual oxidants for intake water with bromides) means the value obtained using the amperometric method for total residual chlorine described in 40 CFR Part 136.

8. The term "low volume waste sources" means, wastewaters from, but not limited to: wet scrubber air pollution control systems, ion exchange water treatment system, water treatment, evaporator and boiler blowdown, laboratory and sampling streams, floor drainage, cooling tower basin cleaning wastes and blowdown from recirculating house service water systems. Sanitary and air conditioning wastes are not included.

OTHER REQUIREMENTS

10. The permittee shall conduct effluent sampling and reporting in accordance with 31 TAC 319.5-319.6. A monthly effluent report must be submitted each month by the 25th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Knowingly making any false statement on any such report may result in the imposition of criminal and/or civil penalties as provided by State law.

    This provision supercedes and replaces Provision 1 Self-Reporting as defined on Page 3 of this permit.

11. Mixing Zone:
    Chronic toxic criteria apply at the edge of the mixing zone. The mixing zone for Outfall 001 (for each jet port) is defined as a volume within a radius of 60 feet extending over the receiving waters from the point where the discharge from each jet port enters the Colorado River.

12. Biomonitoring Requirements:
    Since the discharge from Outfall 001 is intermittent, the biomonitoring requirements shall remain in effect until four biomonitoring tests have been completed.

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

a. The provisions of this section apply to Outfall(s) 001.

b. The permittee shall test the effluent for toxicity in accordance with the provisions in this section. Such testing will determine if an appropriately dilute effluent sample affects the survival and/or reproduction or growth of the appropriate test organism.

Toxicity is herein defined as a statistically significant difference at the 95% confidence level between survival and/or reproduction or growth of the appropriate test organism in a specified effluent concentration and the control (0% effluent).

Lethality, a component of toxicity, is herein defined as a statistically significant difference at the 95% confidence level between survival of the appropriate test organism in a specified effluent concentration and the control (0% effluent).

Significant nonlethal effect, a component of toxicity, is herein defined as a statistically significant difference at the 95% confidence level between reproduction or growth of the appropriate test organism in a specified effluent concentration and the control (0% effluent).
The permittee shall initiate the following series of tests within 90 days of the effective date of this permit. All test organisms, procedures, and quality assurance requirements used shall be in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA 600/4-87/028)," or the latest revision of this document. The TWC may require the permittee to repeat a test, including the control and all effluent dilutions, if the test acceptability criteria, procedures, and quality assurance requirements defined in the test methods are not satisfied. The following tests shall be used:

1) Chronic static renewal 7-day survival, growth and fecundity test using Mysidopsis bahia (Method 1007.0).

2) Chronic static renewal 7-day larval survival and growth test using sheepshead minnow (Cyprinodon variegatus) (Method 1004.0).

c. Five effluent concentrations in addition to an appropriate control (0% effluent) shall be used in the toxicity test. These additional effluent concentrations shall be 100%, 50%, 25%, 13%, and 6%. The low-flow effluent concentration (critical dilution) is defined as 25% effluent and the 1/2 low-flow effluent concentration (2 times the critical dilution) is defined as 50% effluent. If more than 20% of the test organisms in any control die, that test, including the control and all effluent dilutions, shall be repeated.

d. The samples shall be collected at a point following the last treatment unit. Dilution water used in the toxicity tests will be the receiving water collected as close to the point of discharge as possible but unaffected by the discharge.

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

If the receiving water is unsatisfactory as a result of preexisting instream toxicity (greater than 20% mortality in the control), the permittee shall substitute synthetic dilution water for the receiving water in the retest required in item c. above provided the following stipulations are met: (a) a synthetic dilution water control was run in addition to the receiving water control; (b) the synthetic dilution water had 20% or less mortality, whereas the receiving water control had greater than 20% mortality; (c) the permittee submits all test results on the receiving water with the report and information required by items k. and l. below and the Biomonitoring Report Forms for the reporting period; and (d) the synthetic dilution water has a pH, and salinity similar to that of the receiving water.

The permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water if approved by the permitting authority. Synthetic dilution water may be used exclusively for the control in all subsequent tests provided all of the above stipulations are met.

e. A minimum of three (3) flow-weighted 24-hour composite samples representative of dry weather flows during normal operation will be collected from Outfall(s) 001. The 24-hour composite sample consists of a minimum of twelve (12) effluent portions collected at equal time intervals and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

The maximum holding time for any effluent sample shall not exceed 72 hours. The toxicity test must be initiated within 36 hours after collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 4 degrees centigrade during collection, shipping and/or storage.

The 24-hour composite samples must be collected such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.

If flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time, are waived during that sampling period. However, the permittee must collect an effluent composite sample volume that is sufficient to complete the required toxicity tests with daily renewal of the effluent. Where possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item k.

f. The toxicity tests specified above shall be conducted once per quarter.

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

g. Lethality Testing - Special Conditions

1. If any toxicity test at the 25% effluent concentration demonstrates lethality, the permittee shall resample and again conduct the toxicity test(s) for the species that showed lethality within fifteen (15) days of test completion. There shall be a total of three (3) consecutive toxicity tests during a forty-five (45) day period. If one or more of the retests show lethality in the 25% effluent concentration, the permittee may suspend additional retesting for this reporting period and shall notify the TWC in writing and submit all test results within fifteen (15) days.

   The permittee may be required to conduct further monitoring studies if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.

2. If the testing frequency in item f above is monthly, the permittee may substitute the biomonitoring conducted during a retest for the next monthly routine biomonitoring if the time of the retest coincides with the next monthly biomonitoring. Concurrently with the retest, the permittee must also conduct the next month's required biomonitoring for the species that did not demonstrate significant lethality at the 25% effluent concentration.

3. Within thirty (30) days after submitting the test results which demonstrate lethality in one or more of the retests, the permittee shall submit to the TWC a general outline for initiating a Toxicity Reduction Evaluation (TRE). The outline shall include, but is not limited to, such things as: assigning project personnel; a time schedule for obtaining consultants, if needed; a discussion of available influent/effluent data available for review, and specify an initiation date for the TRE with a proposed schedule of specified activities/testing.

4. Ninety (90) days after initiating the TRE, the permittee shall submit a specific detailed plan and schedule for performing the TRE. The TRE shall be designed to determine the general cause of toxicity, possible action to eliminate or reduce the toxicity and develop a corrective action schedule. The permittee is required to implement the TRE with due diligence and shall submit quarterly summaries to the TWC concerning the project results.

   If after initiating the TRE, the effluent ceases to induce lethal responses in the test organisms, the permittee may discontinue the TRE requirements and continue with the remainder of the biomonitoring testing required in sections f. through j. A cessation of lethality is defined as no lethality at the 25% effluent concentration, using the test procedures required in sections b. through e., for a period of four (4) consecutive months with at least monthly sampling and testing. Such evidence shall be submitted to the TWC with a statement of intent to cease the TRE.

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

This permit may be amended to require a compliance schedule for implementation of corrective actions and/or permit limits based upon the results of the TRE and proposed corrective actions.

5. The provisions of g.1. and g.3. are suspended upon submittal of the TRE Plan.

6. If any retest in item g.1 indicates lethality at the 25% effluent concentration, the permittee shall continue biomonitoring quarterly (as a minimum) during the TRE, using the most sensitive species. The biomonitoring procedures specified in items b through e above shall be utilized.

h. Nonlethal Effects Testing - Special Conditions

1. If the testing frequency specified in item f. above is quarterly and if any toxicity test required in items b.-f. above demonstrates a significant nonlethal effect at the 25% effluent concentration, the permittee shall biomonitor once per month, for an additional twelve (12) consecutive months following the toxicity test initially showing significant nonlethal effects. If only one species demonstrated a significant nonlethal effect at the 25% effluent concentration, the permittee may perform the additional 12 consecutive biomonitoring tests utilizing that species only. In this event, the permittee shall continue the first year's quarterly biomonitoring tests for the species that did not demonstrate a significant nonlethal effect. Upon completion of the additional testing requirements, the permittee shall continue biomonitoring utilizing both species specified in item b. once per six (6) months until the expiration date of the permit. The same procedures specified in items b. - e. above shall be used during the monthly, quarterly, and twice-yearly testing.

   This permit may be amended to require effluent limits, additional testing and/or other appropriate action to address non-lethal toxic effects.

2. If the testing frequency specified in item f. above is monthly and if any toxicity test required in items b. - f. above demonstrates a significant nonlethal effect at the 25% effluent concentration during the first year of testing, the permittee shall continue biomonitoring after the first year of testing at a frequency of once per six (6) months until the expiration date of the permit. The same procedures specified in items b.- e. above shall be used.

i. If lethality is shown at the 50% effluent concentration and toxicity is not shown at the 25% effluent concentration during the first year of testing, the permittee shall continue biomonitoring after the first year of testing at a frequency of once every six (6) months until expiration of this permit utilizing the same procedure as specified in b. - e. above.

   This permit may be amended to require effluent limits, additional testing and/or other appropriate action to address toxic effects.

CHRONIC BIOMONITORING REQUIREMENTS: MARINE

j. If the toxicity tests do not indicate toxicity at the 25% effluent concentration and lethality at the 50% effluent concentration during the first year, the permittee shall certify this information in writing to the TWC and these biomonitoring requirements shall expire.

k. The permittee shall prepare a full report of the results according to EPA 600/4-87/028, Section 10, Report Preparation. The full report must be submitted with the first biomonitoring test results, but need not be submitted for subsequent testing unless requested and shall be retained for 3 years at the plant site.

l. The permittee shall submit the toxicity testing information contained in Table 1 of this permit to the Wastewater Permits Section of the Water Quality Division.

m. If monthly biomonitoring is required, the biomonitoring test reports are due on or before the 25th day of the month following sampling.

n. If quarterly biomonitoring is required, the biomonitoring test results are due on or before April 25th, July 25th, October 25th, and January 25th, for biomonitoring conducted during each calendar quarter.

o. If semi-annual biomonitoring is required, test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6 month period.

p. The percent coefficient of variation (standard deviation x 100/ mean) for the mean percent survival shall be 40% or less for the control (0% effluent), low flow dilution and 1/2 low flow dilution. Should the percent coefficient of variation be greater than 40%, the toxicity test, including control and all effluent dilutions shall be repeated. If significant lethality was shown at the low flow effluent dilution or half low flow effluent dilution, this coefficient of variation requirement shall not apply.

TABLE 1 (SHEET 1 OF 6)

MYSIDOPSIS BAHIA SURVIVAL, GROWTH AND FECUNDITY

Date Composites Collected

No. 1 FROM:_____ TO: _____

No. 2 FROM:_____ TO: _____

No. 3 FROM:_____ TO: _____

Test initiated:_____am/pm _____date

Dilution water used: ____Receiving water ____Reconstituted water

PERCENT SURVIVAL

Time of Reading	Percent Effluent 0%	%	%	%	%	%
24h						
48h						
7 day						

DATA TABLE FOR GROWTH OF M. BAHIA

Average Dry Weight in milligrams in replicate chambers

Effluent Conc. (%)	A	B	C	D	E	F	G
0%							
%							
%							
%							
%							
%							

Table 1 (SHEET 2 OF 6)

MYSIDOPSIS BAHIA SURVIVAL, GROWTH AND FECUNDITY

DATA TABLE FOR GROWTH OF M. BAHIA

	0%	%	%	%	%	%
Mean Dry Weight (mg)						
CV (%)*						

* coefficient of variation = standard deviation x 100/mean

NUMBER OF FEMALES WITH EGGS @ 7 DAYS

Percent effluent (%)

REP	0%	%	%	%	%	%
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
Mean % Fecundity						

TABLE 1 (SHEET 3 OF 6)

MYSIDOPSIS BAHIA SURVIVAL, GROWTH AND FECUNDITY

1. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

   Is the mean survival at 7 days significantly less (p=0.05) than the control survival for the % effluent corresponding to (lethality):

   a.) LOW FLOW OR CRITICAL DILUTION (25%): _____ YES _____ NO

   b.) 1/2 LOW FLOW or 2 x CRITICAL DILUTION (50%): _____ YES _____ NO

2. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the % effluent corresponding to (significant non-lethal effects):

   a.) LOW FLOW OR CRITICAL DILUTION (25%): _____ YES _____ NO

   b.) 1/2 LOW FLOW or 2 x CRITICAL DILUTION (50%): _____ YES _____ NO

3. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

   Is the mean number of females with eggs (fecundity) significantly less (p=0.05) than the control's number of females with eggs for the % effluent corresponding to (significant non-lethal effects):

   a.) LOW FLOW OR CRITICAL DILUTION (25%): _____ YES _____ NO

   b.) 1/2 LOW FLOW or 2 x CRITICAL DILUTION (50%): _____ YES _____ NO

4. Enter percent effluent corresponding to each NOEL (no observed effect level) below and circle lowest number:

   a.) NOEL survival = _____% effluent

   b.) NOEL growth = _____% effluent

   c.) NOEL fecundity= _____% effluent

TABLE 1 (SHEET 4 OF 6)

SHEEPSHEAD MINNOW LARVAL SURVIVAL AND GROWTH TEST
(Cyprinodon variegatus)

Date Composites Collected

No. 1 FROM: _____ TO: _____

No. 2 FROM: _____ TO: _____

No. 3 FROM: _____ TO: _____

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Reconstituted water

DATA TABLE FOR SHEEPSHEAD MINNOW SURVIVAL

Effluent Conc. %	Percent Survival in Replicate Chambers				Mean Percent Survival			CV%*
	A	B	C	D	24h	48h	7 days	
0%								
%								
%								
%								
%								
%								

* coefficient of variation = standard deviation x 100/mean

TABLE 1 (SHEET 5 OF 6)

BIOMONITORING REPORTING

SHEEPSHEAD MINNOW LARVAL SURVIVAL AND GROWTH TEST
(Cyprinodon variegatus)

DATA TABLE FOR GROWTH OF SHEEPSHEAD MINNOWS

Effluent Conc (%)	Average Dry Weight in milligrams in replicate chambers				MEAN DRY WEIGHT	CV%*
	A	B	C	D	(MG)	
0%						
%						
%						
%						
%						
%						

* coefficient of variation standard deviation x 100/mean

1. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

   Is the mean survival at 7 days significantly less (p=0.05) than the control survival for the % effluent corresponding to (lethality):

   a.) LOW FLOW OR CRITICAL DILUTION (25%): _____ YES _____ NO

   b.) 1/2 LOW FLOW or 2 x CRITICAL DILUTION (50%): _____ YES _____ NO

TABLE 1 (SHEET 6 OF 6)

BIOMONITORING REPORTING

SHEEPSHEAD MINNOW LARVAL SURVIVAL AND GROWTH TEST
(Cyprinodon variegatus)

2. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

   Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the % effluent corresponding to (significant non-lethal effects):

   a.) LOW FLOW OR CRITICAL DILUTION (25%): _____ YES _____ NO

   b.) 1/2 LOW FLOW or 2 x CRITICAL DILUTION (50%): _____ YES _____ NO

3. Enter percent effluent corresponding to each NOEL (no observed effect level) below and circle lowest number:

   a.) NOEL survival = _____% effluent

   b.) NOEL growth = _____% effluent