BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

JUL 2 3 2009

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail# 7005 1820 0002 2360 8547

FILE NUMBER: LA0038288
AI NUMBER: 19420
ACTIVITY NUMBER: PER20080001

City of Mandeville
Chinchuba Swamp and East Tchefuncte Marsh Wetland Assimilation Project
3101 East Causeway Approach
Mandeville, Louisiana 70448

Attention: Honorable Edward J. Price, III, Mayor

Subject: Louisiana Pollutant Discharge Elimination System (LPDES) permit to discharge treated sanitary wastewater into Chinchuba Bayou, Chinchuba Swamp, and the East Tchefuncte Marsh from a publicly owned treatment works serving the City of Mandeville.

Dear Mayor Price:

This Office has not received comments from either the general public or the City of Mandeville in response to the public notice published in the **ST. TAMMANY NEWS** on June 5, 2009, and the Department of Environmental Quality Public Notice USPS Mailing List and the E-mail Mailing List on June 3, 2009.

Pursuant to the Clean Water Act (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached LPDES permit has been issued. Provisions of this permit may be appealed in writing pursuant to La. R.S. 2024 (A) within 30 days of receipt of this permit. Only those provisions specifically appealed will be suspended by a request for a hearing unless the secretary or the assistant secretary elects to suspend other permit conditions as well. All other provisions of this permit will remain in effect. A request for a hearing must be sent to the following:

Louisiana Department of Environmental Quality
Office of the Secretary
Attention: Hearings Clerk, Legal Affairs Division
Post Office Box 4301
Baton Rouge, Louisiana 70821-4301

To ensure that all correspondence regarding this facility is properly filed into the Department's Electronic Document Management System, you must reference your Agency Interest number AI 19420 and LPDES permit number LA0038288 on all future correspondence to this Department, including Discharge Monitoring Reports.

In accordance with Part II, Section A, Paragraph 9 of the permit, monitoring results should be reported on a Discharge Monitoring Report (DMR) form as per the schedule specified. A copy of the form to be used is attached for your convenience.

A Municipal Water Pollution Prevention Environmental Audit Report Form has been enclosed. Please consult Part II, Section C of the permit for instructions regarding this audit.

Should you have any questions concerning any part of the permit, please contact Mr. Todd Franklin of the Office of Environmental Services, Water Permits Division, at the address on the preceding page or telephone (225) 219-3102.

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

jtf

Attachments (DMR, Permit (Parts I-III), MWPP, and Wetland Monitoring & Reporting Requirement Forms)

cc: IO-W

ec: Mr. Todd Franklin
Water Permits Division

Mr. Ronnie Bean
Water Permits Division

Ms. Evelyn Rosborough (6WQ-CA)
U.S. Environmental Protection Agency
Region VI

Permit Compliance Unit
Office of Environmental Compliance

Southeast Regional Office
Office of Environmental Compliance

Public Health Chief Engineer
Office of Public Health
Department of Health and Hospitals

Ms. Kelly Petersen
Office of Environmental Compliance

Joel Lindsey
Comite Resources, Inc.
lindseyj@bellsouth.net

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

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

NAME ____________________
ADDRESS ____________________

FACILITY ____________________
LOCATION ____________________

(2-16)	*(17-19)*
PERMIT NUMBER	DISCHARGE NUMBER

Check Appropriate Box: ☐ Major Facility ☐ Minor Facility

☐ Check here if No Discharge

NOTE: Read Instructions before completing this form.

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

PARAMETER *(32-37)*		*(3 Card Only)* QUANTITY OR LOADING *(46-53)*	*(54-61)*		*(4 Card Only)* QUALITY OR CONCENTRATION *(38-45)*	*(46-53)*	*(54-61)*		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	*(62-63)*	*(64-68)*	*(69-70)*
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
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	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY 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.		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

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

DMR Instructions

(from back of DMR)

PAPER WORK REDUCTION ACT NOTICE

Public reporting burden for this collection of information is estimated to vary from a range of 10 hours as an average per response for some minor facilities, to 110 hours as an average per response for some major facilities, with a weighted average for major and minor facilities of 18 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and

GENERAL INSTRUCTIONS

1. If form has been partially completed by preprinting, disregard instructions directed at entry of that information already pre-printed.
2. Enter "Permittee Name/Mailing Address (and facility name/ location, if different)," "Permit Number," and "Discharge" where indicated. (A separate form is required for each discharge.)
3. Enter dates beginning and ending "Monitoring Period" covered form where indicated.
4. Enter each "Parameter" as specified in monitoring requirements of permit.
5. Enter "Sample Measurement" data for each parameter under "Quantity" and "Quality" in units specified in permit. "Average" is normally arithmetic average (geometric average for bacterial parameters) of all sample measurements for each parameter obtained during "Monitoring Period"; "Maximum" and "Minimum" are normally extreme high and low measurements obtained during "Monitoring Period". (Note to municipals and secondary treatment requirement: Enter 30-day average of sample measurements under "Average", and enter maximum 7-day average of sample measurements obtained during monitoring period under "Maximum.")
6. Enter "Permit Requirement" for each parameter under "Quantity" and "Quality" as specified in permit.
7. Under "No Ex" enter number of sample measurements during monitoring period that exceeded maximum (and/or minimum or 7-day average as appropriate) permit requirement for each parameter. If none, enter "0".
8. Enter "Frequency of Analysis" both as "Sample Measurement" (actual frequency of sampling and analysis used during monitoring period) and as "Permit Requirement" specified in permit. (e.g. Enter "Cont," for continuous monitoring, "1/7" for one day per week, "1/30" for one day per month, "1/90" for one day per quarter, etc.)
9. Enter "Sample Type" both as "Sample Measurement" (actual sample type used during monitoring period) and as "Permit Requirement", (e.g. Enter "Grab" for individual sample, "24HC" for 24-hour composite, "CONT" for continuous monitoring, etc.)
10. Where violations of permit requirements are reported, attach a brief explanation to describe cause and corrective actions taken, and reference each violation by date.
11. If "No Discharge" occurs during monitoring period, check the box for "No Discharge", or if no box is present please write the words "NO DISCHARGE" across the DMR Form.
12. Enter "Name/Title of Principal Executive Officer" with "Signature of Principal Executive Officer or Authorized Agent", "Telephone Number", and "Date" at bottom of form.
13. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
14. More detailed instructions for use of this Discharge Monitoring Report (DMR) form may be obtained from Office(s) specified in permit.
15. Facilities using the digital form of the DMR must first obtain approval from the NPDES authority in their state. The parameters and data on the form must be mono-spaced (e.g. Courier) and have a size of 10 pitch (12 points). Approval for EPA Region 6 can be obtained by contacting Cathy Bius at (214)665-6456. Permitees holding a storm water general permit in New Mexico, Texas, or Oklahoma do not need approval if they use the correct type as specified above. THE FORM MAY NOT BE ALTERED IN ANY MANNER.

LEGAL NOTICE

This report is required by law (33 U.S.C. 1318; 40 C.F.R. 125.27). Failure to report or failure to report truthfully can result in civil penalties not to exceed $10,000 per day of violation; or in criminal penalties not to exceed $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

PERMIT NUMBER:
LA0038288

AGENCY INTEREST
NUMBER: AI 19420

ACTIVITY NUMBER:
PER20080001

DEQ
LOUISIANA

OFFICE OF ENVIRONMENTAL SERVICES

Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

City of Mandeville
Chinchuba Swamp and East Tchefuncte Marsh Wetland Assimilation Project
3101 East Causeway Approach
Mandeville, Louisiana 70448

Type Facility: existing publicly owned treatment works serving the City of Mandeville

Location: 1100 Mandeville High Boulevard in Mandeville, St. Tammany Parish

Receiving Waters: Current: Chinchuba Bayou; thence into Lake Pontchartrain (Subsegment 040904)

Planned: Chinchuba Swamp (Subsegment 040805) and the East Tchefuncte Marsh (Subsegment 040806)

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit shall become effective on 01 September 2009

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on 21 July 2009

Cheryl Sonnier Nolan
Assistant Secretary

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date of the permit and lasting through completion of the construction of the outfalls into the Chinchuba Swamp and the East Tchefuncte Marsh, but no later than two (2) years from the effective date of the permit the permittee is authorized to discharge from:

Outfalls 001 - treated sanitary wastewater (design capacity is 4 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
	Storet Code	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Conventional Pollutants							
Flow-MGD	50050	Report (MGD)	Report (MGD)	---	---	Continuous	Recorder[1]
$CBOD_5$	00310	334 lbs/day	---	10 mg/l	15 mg/l	2/week	6 Hr Comp
TSS	00530	500 lbs/day	---	15 mg/l	23 mg/l	2/week	6 Hr Comp
Ammonia-Nitrogen	00610	133 lbs/day	---	4 mg/l	8 mg/l	2/week	6 Hr Comp
Fecal Coliform[2] colonies/100ml	74055	---	---	200	400	2/week	Grab
pH (Standard Units)[3]	00400	---	---	---	---	2/week	Grab
Priority Pollutants							
Phenols, Total[4]	03604	Report (lb/day)	Report (lb/day)	---	---	1/quarter	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	Report (lb/day)	---	---	1/quarter	24 Hr Comp
Zinc, Total[4]	01092	1.64 lb/day	3.90 lb/day	---	---	1/quarter	24 Hr Comp

Whole Effluent Toxicity Testing[5]

		Quality (Percent % UNLESS STATED)			
Biomonitoring[5]	Storet Code	Monthly Avg. Minimum	7-Day Minimum	Measurement Frequency	Sample Type
Ceriodaphnia dubia	TLP3B	Report[6]	Report[6]	1/quarter	24-Hr Composite
	TOP3B	Report	Report	1/quarter	24-Hr Composite
	TPP3B	Report	Report	1/quarter	24-Hr Composite
	TGP3B	Report[6]	Report[6]	1/quarter	24-Hr Composite
	TQP3B	Report	Report	1/quarter	24-Hr Composite
Pimephales promelas	TLP6C	Report[6]	Report[6]	1/quarter	24-Hr Composite
	TOP6C	Report	Report	1/quarter	24-Hr Composite
	TPP6C	Report	Report	1/quarter	24-Hr Composite
	TGP6C	Report[6]	Report[6]	1/quarter	24-Hr Composite
	TQP6C	Report	Report	1/quarter	24-Hr Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

If a test failure has occurred and the required retests have been performed, the test results are to be reported on the DMR as follows:

Biomonitoring [5]	Storet Code	Monthly Avg. Minimum	7-Day Minimum	Measurement Frequency	Sample Type
Retest #1	22415	Report[6]	Report[6]	As Required[7]	24-Hr Composite
Retest #1	22418	Report[6]	Report[6]	As Required[7]	24-Hr Composite
Retest #2	22416	Report[6]	Report[6]	As Required[7]	24-Hr Composite
Retest #2	22419	Report[6]	Report[6]	As Required[7]	24-Hr Composite
Retest #3	51443	Report[6]	Report[6]	As Required[7]	24-Hr Composite
Retest #3	51444	Report[6]	Report[6]	As Required[7]	24-Hr Composite

[1] Includes totalizing meter or totalizer.

[2] See Part II, Section A, Paragraph 8

[3] The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

[4] If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements. Please note that the laboratory minimum detection level must be at or below the listed MQL.

Pollutant	MQL
Phenols	5 µg/L
Lead	5 µg/L
Zinc	20 µg/L

[5] See Part II, Whole Effluent Toxicity Testing Requirements.

[6] Species Quality Reporting Units: Pass = 0, Fail = 1

[7] Monthly Testing Required only if routine test for reporting period (for either species) fails.

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 001, at the point of discharge from the last treatment unit prior to mixing with other waters.

According to an electronic mail, from David DeGeneres to Todd Franklin dated February 17, 2009, the City of Mandeville currently discharges 100% of the effluent into Bayou Chinchuba. However, the distribution system is currently under construction and will be completed in approximately 6 months. Reporting requirements for phenols and lead, as opposed to limitations, are being placed into the permit, under the assumption that the distribution system will be completed within at least three years from the effective date of the permit. If the distribution system is not completed within three years from the effective date of the permit, the permit must be reopened to include limitations for phenols and lead in Outfall 001.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning upon completion of the construction of the outfalls into the Chinchuba Swamp and East Tchefuncte Marsh, but no later than two (2) years from the effective date of the permit and lasting through three (3) years from the effective date of the permit, the permittee is authorized to discharge from:

Outfalls 002 - treated sanitary wastewater (design capacity is 4 MGD). 30% of the total effluent will flow through Outfall 002 into Chinchuba Swamp (1.2 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Storet Code	Discharge Limitations: Monthly Avg.	Discharge Limitations: Weekly Avg.	Discharge Limitations: Monthly Avg.	Discharge Limitations: Weekly Avg.	Monitoring Requirements: Measurement Frequency	Monitoring Requirements: Sample Type
Conventional Pollutants							
Flow-MGD	50050	Report (MGD)	Report (MGD)	---	---	Continuous	Recorder[1]
BOD_5	00310	300 lbs/day	---	30 mg/l	45 mg/l	2/week	6 Hr Comp
TSS	00530	901 lbs/day	---	90 mg/l	135 mg/l	2/week	6 Hr Comp
Fecal Coliform[2] colonies/100ml	74055	---	---	200	400	2/week	Grab
pH (Standard Units)[3]	00400	---	---	---	---	2/week	Grab
Priority Pollutants							
Phenols, Total[4]	03604	Report (lb/day)	Report (lb/day)	---	---	1/quarter	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	Report (lb/day)	---	---	1/quarter	24 Hr Comp
Zinc, Total[4]	01092	0.49 lb/day	1.17 lb/day	---	---	1/quarter	24 Hr Comp
Wetland Assimilation Project Parameters							
Magnesium, Total	00927	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Cadmium, Total[4]	01027	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Chromium, Total[4]	01034	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Copper, Total[4]	01042	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Zinc, Total[4]	01092	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Iron, Total	01045	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nickel, Total[4]	01067	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Silver, Total[4]	01077	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Selenium, Total[4]	01147	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nitrogen, Total[5 & 6]	00600	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp
Phosphorus, Total[6]	00665	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Wetland Monitoring[7]

Whole Effluent Toxicity Testing [8]

		Quality (Percent % UNLESS STATED)			
Biomonitoring [8]	Storet Code	Monthly Avg. Minimum	48-Hour Minimum	Measurement Frequency	Sample Type[9]
Daphnia pulex	TEM3D	Report[10]	Report[10]	1/year	24 Hr. Composite
	TOM3D	Report	Report	1/year	24 Hr. Composite
	TQM3D	Report	Report	1/year	24 Hr. Composite
Pimephales promelas	TEM6C	Report[10]	Report[10]	1/year	24 Hr. Composite
	TOM6C	Report	Report	1/year	24 Hr. Composite
	TQM6C	Report	Report	1/year	24 Hr. Composite

If a test failure has occurred and the required retests have been performed, the test results are to be reported on the DMR as follows:

Biomonitoring [8]	Storet Code	Monthly Avg. Minimum	48-Hour Minimum	Measurement Frequency	Sample Type[9]
Retest #1	22415	Report[10]	Report[10]	As Required[11]	24 Hr. Composite
Retest #2	22416	Report[10]	Report[10]	As Required[11]	24 Hr. Composite
Retest #3	51443	Report[10]	Report[10]	As Required[11]	24 Hr. Composite

[1] Includes totalizing meter or totalizer.

[2] See Part II, Section A, Paragraph 8

[3] The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

[4] If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements. Please note that the laboratory minimum detection level must be at or below the listed MQL.

Pollutant	MQL
Phenols	5 µg/L
Lead	5 µg/L
Cadmium	1 µg/L
Chromium	10 µg/L
Copper	10 µg/L
Zinc	20 µg/L
Nickel	40 µg/L

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Silver	2 µg/L
Selenium	5 µg/L

5 Total Nitrogen will be reported as the sum of Total Kjeldal Nitrogen (TKN) plus Nitrate and Nitrite.

6 Data obtained from the TN and TP analysis will be used to derive nutrient loading per square meter of wetlands which will be reported in the Annual Wetland Monitoring Report. **If loading rates exceed 15 g/m^2/yr total nitrogen or 4 g/m^2/yr total phosphorus, then either the loading rates must be reduced or the assimilation area must be increased.**

7 See Part II, Wetland System Monitoring Requirement

8 See Part II, Whole Effluent Toxicity Testing Requirements.

9 The biomonitoring sample shall consist of a combination of Outfalls 002 and 003.

10 Species Quality Reporting Units: Pass = 0, Fail = 1

11 Monthly Testing Required only if routine test for reporting period (for either species) fails.

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations, except for the Wetland Monitoring, which shall be in accordance with Part II, Wetland System Monitoring Requirements:

Outfall 002, at the point of discharge from the last treatment unit and before entering the distribution system into the Chinchuba Swamp. The distribution points will be utilized in any combination and rotation necessary to ensure uniform coverage and to maximize the assimilation potential and the productivity of the wetland. **The discharge patterns shall be recorded and included in the Annual Wetland Monitoring Report.**

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning upon completion of the construction of the outfalls into the Chinchuba Swamp and East Tchefuncte Marsh, but no later than two (2) years from the effective date of the permit and lasting through three (3) years from the effective date of the permit, the permittee is authorized to discharge from:

Outfalls 003 - treated sanitary wastewater (design capacity is 4 MGD). 70% of the total effluent will flow through Outfall 003 into the East Tchefuncte Marsh (2.8 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
	Storet Code	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Conventional Pollutants							
Flow-MGD	50050	Report (MGD)	Report (MGD)	---	---	Continuous	Recorder[1]
BOD_5	00310	701 lbs/day	---	30 mg/l	45 mg/l	2/week	6 Hr Comp
TSS	00530	2,102 lbs/day	---	90 mg/l	135 mg/l	2/week	6 Hr Comp
Fecal Coliform[2] colonies/100ml	74055	---	---	200	400	2/week	Grab
pH (Standard Units)[3]	00400	---	---	---	---	2/week	Grab
Priority Pollutants							
Phenols, Total[4]	03604	Report (lb/day)	Report (lb/day)	---	---	1/quarter	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	Report (lb/day)	---	---	1/quarter	24 Hr Comp
Zinc, Total[4]	01092	1.15 lb/day	2.73 lb/day	---	---	1/quarter	24 Hr Comp
Wetland Assimilation Project Parameters							
Magnesium, Total	00927	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Cadmium, Total[4]	01027	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Chromium, Total[4]	01034	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Copper, Total[4]	01042	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Zinc, Total[4]	01092	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Iron, Total	01045	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nickel, Total[4]	01067	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Silver, Total[4]	01077	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Selenium, Total[4]	01147	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nitrogen, Total[5 & 6]	00600	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp
Phosphorus, Total[6]	00665	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Wetland Monitoring[7]

[1] Includes totalizing meter or totalizer.

[2] See Part II, Section A, Paragraph 8

[3] The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

[4] If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements. Please note that the laboratory minimum detection level must be at or below the listed MQL.

Pollutant	MQL
Phenols	5 µg/L
Lead	5 µg/L
Cadmium	1 µg/L
Chromium	10 µg/L
Copper	10 µg/L
Zinc	20 µg/L
Nickel	40 µg/L
Silver	2 µg/L
Selenium	5 µg/L

[5] Total Nitrogen will be reported as the sum of Total Kjeldal Nitrogen (TKN) plus Nitrate and Nitrite.

[6] Data obtained from the TN and TP analysis will be used to derive nutrient loading per square meter of wetlands which will be reported in the Annual Wetland Monitoring Report. **If loading rates exceed 15 g/m^2/yr total nitrogen or 4 g/m^2/yr total phosphorus, then either the loading rates must be reduced or the assimilation area must be increased.**

[7] See Part II, Wetland System Monitoring Requirement

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations, except for the Wetland Monitoring, which shall be in accordance with Part II, Wetland System Monitoring Requirements:

Outfall 003, at the point of discharge from the last treatment unit and before entering the distribution system into the East Tchefuncte Marsh. The distribution points will be utilized in any combination and rotation necessary to ensure uniform coverage and to maximize the assimilation potential and the productivity of the wetland. **The discharge patterns shall be recorded and included in the Annual Wetland Monitoring Report.**

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning three (3) years from the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from:

Outfalls 002 - treated sanitary wastewater (design capacity is 4 MGD). 30% of the total effluent will flow through Outfall 002 into Chinchuba Swamp (1.2 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
	Storet Code	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Conventional Pollutants							
Flow-MGD	50050	Report (MGD)	Report (MGD)	---	---	Continuous	Recorder[1]
BOD_5	00310	300 lbs/day	---	30 mg/l	45 mg/l	2/week	6 Hr Comp
TSS	00530	901 lbs/day	---	90 mg/l	135 mg/l	2/week	6 Hr Comp
Fecal Coliform[2] colonies/100ml	74055	---	---	200	400	2/week	Grab
pH (Standard Units)[3]	00400	---	---	---	---	2/week	Grab
Priority Pollutants							
Phenols, Total[4]	03604	0.53 lb/day	1.26 lb/day	---	---	1/quarter	24 Hr Comp
Lead, Total[4]	01051	0.021 lb/day	0.049 lb/day	---	---	1/quarter	24 Hr Comp
Zinc, Total[4]	01092	0.49 lb/day	1.17 lb/day	---	---	1/quarter	24 Hr Comp
Wetland Assimilation Project Parameters							
Magnesium, Total	00927	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Cadmium, Total[4]	01027	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Chromium, Total[4]	01034	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Copper, Total[4]	01042	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Zinc, Total[4]	01092	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Iron, Total	01045	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nickel, Total[4]	01067	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Silver, Total[4]	01077	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Selenium, Total[4]	01147	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nitrogen, Total[5 & 6]	00600	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp
Phosphorus, Total[6]	00665	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Wetland Monitoring[7]

Whole Effluent Toxicity Testing [8]

		Quality (Percent % UNLESS STATED)			
Biomonitoring [8]	Storet Code	Monthly Avg. Minimum	48-Hour Minimum	Measurement Frequency	Sample Type[9]
Daphnia pulex	TEM3D	Report[10]	Report[10]	1/year	24 Hr. Composite
	TOM3D	Report	Report	1/year	24 Hr. Composite
	TQM3D	Report	Report	1/year	24 Hr. Composite
Pimephales promelas	TEM6C	Report[10]	Report[10]	1/year	24 Hr. Composite
	TOM6C	Report	Report	1/year	24 Hr. Composite
	TQM6C	Report	Report	1/year	24 Hr. Composite

If a test failure has occurred and the required retests have been performed, the test results are to be reported on the DMR as follows:

Biomonitoring [8]	Storet Code	Monthly Avg. Minimum	48-Hour Minimum	Measurement Frequency	Sample Type[9]
Retest #1	22415	Report[10]	Report[10]	As Required[11]	24 Hr. Composite
Retest #2	22416	Report[10]	Report[10]	As Required[11]	24 Hr. Composite
Retest #3	51443	Report[10]	Report[10]	As Required[11]	24 Hr. Composite

[1] Includes totalizing meter or totalizer.

[2] See Part II, Section A, Paragraph 8

[3] The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

[4] If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements. Please note that the laboratory minimum detection level must be at or below the listed MQL.

Pollutant	MQL
Phenols	5 µg/L
Lead	5 µg/L
Cadmium	1 µg/L
Chromium	10 µg/L
Copper	10 µg/L
Zinc	20 µg/L
Nickel	40 µg/L

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Silver	2 µg/L
Selenium	5 µg/L

[5] Total Nitrogen will be reported as the sum of Total Kjeldal Nitrogen (TKN) plus Nitrate and Nitrite.

[6] Data obtained from the TN and TP analysis will be used to derive nutrient loading per square meter of wetlands which will be reported in the Annual Wetland Monitoring Report. **If loading rates exceed 15 g/m^2/yr total nitrogen or 4 g/m^2/yr total phosphorus, then either the loading rates must be reduced or the assimilation area must be increased.**

[7] See Part II, Wetland System Monitoring Requirement

[8] See Part II, Whole Effluent Toxicity Testing Requirements.

[9] The biomonitoring sample shall consist of a combination of Outfalls 002 and 003.

[10] Species Quality Reporting Units: Pass = 0, Fail = 1

[11] Monthly Testing Required only if routine test for reporting period (for either species) fails.

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations, except for the Wetland Monitoring, which shall be in accordance with Part II, Wetland System Monitoring Requirements:

Outfall 002, at the point of discharge from the last treatment unit and before entering the distribution system into the Chinchuba Swamp. The distribution points will be utilized in any combination and rotation necessary to ensure uniform coverage and to maximize the assimilation potential and the productivity of the wetland. **The discharge patterns shall be recorded and included in the Annual Wetland Monitoring Report.**

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning three (3) years from the effective date of the permit and lasting through expiration date of the permit, the permittee is authorized to discharge from:

Outfalls 003 - treated sanitary wastewater (design capacity is 4 MGD). 70% of the total effluent will flow through Outfall 003 into the East Tchefuncte Marsh (2.8 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
	Storet Code	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Conventional Pollutants							
Flow-MGD	50050	Report (MGD)	Report (MGD)	---	---	Continuous	Recorder[1]
BOD_5	00310	701 lbs/day	---	30 mg/l	45 mg/l	2/week	6 Hr Comp
TSS	00530	2,102 lbs/day	---	90 mg/l	135 mg/l	2/week	6 Hr Comp
Fecal Coliform[2] colonies/100ml	74055	---	---	200	400	2/week	Grab
pH (Standard Units)[3]	00400	---	---	---	---	2/week	Grab
Priority Pollutants							
Phenols, Total[4]	03604	1.19 lb/day	2.84 lb/day	---	---	1/quarter	24 Hr Comp
Lead, Total[4]	01051	0.047 lb/day	0.11 lb/day	---	---	1/quarter	24 Hr Comp
Zinc, Total[4]	01092	1.15 lb/day	2.73 lb/day	---	---	1/quarter	24 Hr Comp
Wetland Assimilation Project Parameters							
Magnesium, Total	00927	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Lead, Total[4]	01051	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Cadmium, Total[4]	01027	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Chromium, Total[4]	01034	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Copper, Total[4]	01042	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Zinc, Total[4]	01092	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Iron, Total	01045	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nickel, Total[4]	01067	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Silver, Total[4]	01077	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Selenium, Total[4]	01147	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/6 months	24 Hr Comp
Nitrogen, Total[5 & 6]	00600	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp
Phosphorus, Total[6]	00665	Report (lb/day)	---	Report (mg/l)	Report (mg/l)	1/quarter	6 Hr Comp

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Wetland Monitoring[7]

[1] Includes totalizing meter or totalizer.

[2] See Part II, Section A, Paragraph 8

[3] The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

[4] If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements. Please note that the laboratory minimum detection level must be at or below the listed MQL.

Pollutant	MQL
Phenols	5 µg/L
Lead	5 µg/L
Cadmium	1 µg/L
Chromium	10 µg/L
Copper	10 µg/L
Zinc	20 µg/L
Nickel	40 µg/L
Silver	2 µg/L
Selenium	5 µg/L

[5] Total Nitrogen will be reported as the sum of Total Kjeldal Nitrogen (TKN) plus Nitrate and Nitrite.

[6] Data obtained from the TN and TP analysis will be used to derive nutrient loading per square meter of wetlands which will be reported in the Annual Wetland Monitoring Report. **If loading rates exceed 15 g/m^2/yr total nitrogen or 4 g/m^2/yr total phosphorus, then either the loading rates must be reduced or the assimilation area must be increased.**

[7] See Part II, Wetland System Monitoring Requirement

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

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations, except for the Wetland Monitoring, which shall be in accordance with Part II, Wetland System Monitoring Requirements:

Outfall 003, at the point of discharge from the last treatment unit and before entering the distribution system into the East Tchefuncte Marsh. The distribution points will be utilized in any combination and rotation necessary to ensure uniform coverage and to maximize the assimilation potential and the productivity of the wetland. **The discharge patterns shall be recorded and included in the Annual Wetland Monitoring Report.**

PART II

OTHER REQUIREMENTS

In addition to the standard conditions required in all permits and listed in Part III, the office has established the following additional requirements in accordance with the Louisiana Water Quality Regulations.

SECTION A. GENERAL STATEMENTS

1. The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

   This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

   a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

   b) Controls any pollutant not limited in the permit; or

   c) Requires reassessment due to change in 303(d) status of waterbody; or

   d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

2. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.

3. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.

4. For definitions of monitoring and sampling terminology see Part III, Section F.

5. 24-hour Oral Reporting: Daily Maximum Limitation Violations

   Under the provisions of Part III Section D.6.e.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to the Office of Environmental Compliance within 24 hours from the time the permittee became aware of the violation followed by a written report in five days.

   Pollutants: None

6. As an exception to Part III Section D.6.e.(1), the permittee shall report all overflows in the collection system with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and the ultimate discharge location if not contained (e.g.,

OTHER REQUIREMENTS (cont.)

storm sewer system, ditch, tributary). All other overflows and overflows which endanger human health or the environment must be reported in the manner described in Part III, Section D.6 of the permit.

7. CONSTRUCTION COMPLIANCE SCHEDULE

The permittee shall efficiently operate and maintain the existing treatment facility so as to discharge effluent which does not exceed the INTERIM EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS.

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS specified in accordance with the following schedule:

ACTIVITY	DATE
Achieve Interim Effluent Limitations and Monitoring Requirements for Outfall 001	Effective Date of the Permit
Achieve Interim Effluent Limitations and Monitoring Requirements for Outfalls 002 and 003	Upon completion of the construction of the outfalls into the Chinchuba Swamp and East Tchefuncte Marsh, but no later than two (2) years from the effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements for Outfalls 002 and 003	Three years from the effective date of the permit.

The above listed activities must be achieved on or before the deadline set in the table above. Additionally, the Permittee shall submit a progress report outlining the status of all related projects on a yearly basis (from the effective date of the permit) until compliance is achieved.

Within 14 days of completion of the construction of the distribution system, the Permittee shall notify the Department of Environmental Quality – Office of Environmental Compliance, in writing, that construction has been completed. In addition, enforcement authority has been retained by EPA. Therefore, EPA must also be notified at the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

Where the percent project completion reported is less than would be required to assure completion of construction by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

No later than 14 days following a date for a specific action (as opposed to a report of progress), the permittee shall submit a written notice of compliance or noncompliance.

OTHER REQUIREMENTS (cont.)

8. Future water quality studies may indicate potential toxicity from the presence of residual chlorine in the treatment facility's effluent. Therefore, the permittee is hereby advised that a future Total Residual Chlorine Limit may be required if chlorine is used as a method of disinfection. In many cases, this becomes a NO MEASURABLE Total Residual Chlorine Limit. If such a limit were imposed, the permittee would be required to provide for dechlorination of the effluent prior to a discharge.

9. DISCHARGE MONITORING REPORTS

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or an approved substitute). All monitoring reports must be retained for a period of at least three (3) years from the date of the sample measurement. The permittee shall make available to this Department, upon request, copies of all monitoring data required by this permit.

If there is a no discharge event at any of the monitored outfall(s) during the sampling period, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

Reporting periods shall end on the last day of the month. Monitoring results for each month shall be summarized on a Discharge Monitoring Report (DMR) Form and submitted to the Office of Environmental Compliance on a monthly basis, postmarked no later than the 15th day of the month following each reporting period.

Permittees shall be required to submit DMRs according to the following schedule or as established in the permit:

For parameter(s) with monitoring frequency(ies) of **1/month or more frequent**:

Postmark DMR by the 15th day of the following month.

For parameter(s) with monitoring frequency (ies) of **1/quarter**:

Monitoring Period	DMR Postmark Date
January 1 – March 31	April 15th
April 1 – June 30	July 15th
July 1 – September 30	October 15th
October 1 – December 31	January 15th

For parameter(s) with monitoring frequency (ies) of **semi-annual**:

Monitoring Period	DMR Postmark Date
January 1-June 30	July 15th
July 1- December 31	January 15th

For parameter(s) with monitoring frequency(ies) of **1/year**:

Monitoring Period	DMR Postmark Date
January 1- December 31	January 15th

OTHER REQUIREMENTS (cont.)

Duplicate copies of DMRs (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503.B, and all other reports (one set of originals) required by this permit shall be submitted to the Permit Compliance Unit at the following address:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attention: Permit Compliance Unit

In addition, enforcement authority has been retained by EPA. Therefore, EPA must also be notified according to the provisions above until notification that enforcement authority has been assumed by LDEQ. The written report shall be submitted to the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

10. The acceptance of hauled domestic septage is prohibited unless otherwise authorized by this Department. Septage is defined in LAC 33:IX.2313 as the liquid and solid material pumped from a septic tank, cesspool, portable toilet, Type III marine sanitation device, any similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained that receives only domestic sewage.

OTHER REQUIREMENTS (cont.)

SECTION B. STORMWATER DISCHARGES

1. This section applies to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow.

2. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination, shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in Paragraph 4 below.

3. The permittee shall prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. EPA document 833-R-92-002 (Storm Water Management for Industrial Activities) may be used as a guidance and may be obtained by writing to the U.S. Environmental Protection Agency, Office of Water Resources (RC-4100), 401 M Street, S.W., Washington D.C. 20460 or by calling (202) 260-7786.

4. The following conditions are applicable to all facilities and shall be included in the SWP3 for the facility.

   a. The permittee shall conduct an annual inspection of the facility site to identify areas contributing to the storm water discharge from developed areas of the facility and evaluate whether measures to reduce pollutant loadings identified in the SWP3 are adequate and have been properly implemented in accordance with the terms of the permit or whether additional control measures are needed.

   b. The permittee shall develop a site map that includes all areas where stormwater may contact potential pollutants or substances that can cause pollution. Any location where reportable quantities leaks or spills have previously occurred are to be documented in the SWP3. The SWP3 shall contain a description of the potential pollutant sources, including, the type and quantity of material present and what action has been taken to assure stormwater precipitation will not directly contact the substances and result in contaminated runoff.

   c. Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural condition of (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters, the SWP3 should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

   d. The permittee shall maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the SWP3 and the permit, and identifying any incidents of noncompliance. The summary report should contain, at a minimum, the date and time of inspection, name of inspector(s), conditions found, and changes to be made to the SWP3.

   e. The summary report and the following certification shall be signed in accordance with LAC 33:IX.2503. The summary report is to be attached to the SWP3 and provided to the Department upon request.

      "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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."

      Signatory requirements for the certification may be found in Part III, Section D.10 of this permit.

OTHER REQUIREMENTS (cont.)

f. The permittee shall make available to the Department, upon request, a copy of the SWP3 and any supporting documentation.

5. The following shall be included in the SWP3, if applicable.

a. The permittee shall utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to:
   i. maintaining adequate roads and driveway surfaces;
   ii. removing debris and accumulated solids from the drainage system; and
   iii. cleaning up immediately any spill by sweeping, absorbent pads, or other appropriate methods.

b. All spilled product and other spilled wastes shall be immediately cleaned up and disposed of according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. Use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with State or Federal safety regulations (i.e., requirement for non-slippery work surface). In all such cases, initial cleanup shall be done by physical removal and chemical usage shall be minimized.

c. All equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other materials exposed to stormwater shall be maintained in a manner which prevents contamination of stormwater by pollutants.

d. All waste fuel, lubricants, coolants, solvents, or other fluids used in the repair or maintenance of vehicles or equipment shall be recycled or contained for proper disposal. Spills of these materials are to be cleaned up by dry means whenever possible.

e. All storage tank installations (with a capacity greater than 660 gallons for an individual container, or 1,320 gallons for two or more containers in aggregate within a common storage area) shall be constructed so that a secondary means of containment is provided for the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spills.

f. All diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. All drains from diked areas shall be equipped with valves that shall be kept in the closed condition except during periods of supervised discharge.

g. All check valves, tanks, drains, or other potential sources of pollutant releases shall be inspected and maintained on a regular basis to assure their proper operation and to prevent the discharge of pollutants.

h. The permittee shall assure compliance with all applicable regulations promulgated under the Louisiana Solid Waste and Resource Recovery Law and the Hazardous Waste Management Law (L.R.S. 30:2151, etc.). Management practices required under above regulations shall be referenced in the SWP3.

i. The permittee shall amend the SWP3 whenever there is a change in the facility or change in the operation of the facility that materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

j. If the SWP3 proves to be ineffective in achieving the general objectives of preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements.

OTHER REQUIREMENTS (cont.)

6. Facility Specific SWP3 Conditions:

   a. **Site Map.** The locations of the following areas, where such areas are exposed to precipitation, shall also be included on the site map: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides.

   b. **Employee Training.** At a minimum, must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; proper procedures for using fertilizer, herbicides and pesticides.

   c. **Potential Pollutant Sources.** The summary of potential pollutant sources must also list the activities and pollutants from the following areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station; and access roads/rail lines.

   d. **Description of BMPs to be Used.** In addition to the other BMPs considered, the facility must consider routing storm water into treatment works, or covering exposed materials from the following exposed areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station.

   e. **Inspections:** The following areas must be included in all monthly inspections: access roads/rail lines; grit, screenings and other solids handling, storage or disposal areas; sludge drying beds, dried sludge piles; compost piles; septage and/or hauled waste receiving station areas.

   f. **Wastewater and Washwater Requirements.** If washwaters are handled in another manner other than the treatment works, the disposal method must be described and all pertinent documentation must be attached to the plan.

OTHER REQUIREMENTS (cont.)

SECTION C. MUNICIPAL WATER POLLUTION PREVENTION

Pollution Prevention Requirements

1. The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. A copy of the Environmental Audit Form has been attached to this permit. Please make additional copies to be utilized for each year of this permit. Additional copies can be obtained upon request.

   The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

   These reports shall discuss the following items:

   a. The influent loading, flow, and design capacity of the facility;
   b. The effluent quality and plant performance;
   c. The age of the wastewater treatment facility;
   d. Bypasses and overflows of the tributary sewerage system and treatment works;
   e. The ultimate disposition of the sewage sludge;
   f. Landfilling of sewage sludge and potential alternatives (if applicable);
   g. New developments at the facility;
   h. Operator certification and training;
   i. The financial status of the facility; and
   j. A subjective evaluation of conditions at the facility.

2. A resolution from the permittee's governing body shall be obtained as part of the Environmental Audit Report. This resolution shall include, at a minimum, the following:

   a. An acknowledgement that the governing body has reviewed the Environmental Audit Report;

   b. A description of actions that the permittee will take to maintain compliance with the permit conditions, and if necessary, include a schedule outlining major projects to be accomplished.

3. The Environmental Audit Report and the governing body's resolution must be signed by a duly authorized representative of the permittee and shall be maintained with the permit and permit related records (i.e. lab data, DMRs), and made available upon request by duly authorized regional inspectors and/or DEQ Headquarters representatives.

OTHER REQUIREMENTS (cont.)

SECTION D. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   d. Any pollutant, including oxygen demanding pollutants (e.g., BOD5), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under LAC 33:IX.Subpart 2.Chapter 61.

3. The permittee shall provide adequate notice of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

   c. Any notice shall include information on (1) the quality and quantity of effluent to be introduced into the treatment works, and (2) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

OTHER REQUIREMENTS (cont.)

SECTION E. WETLAND SYSTEM MONITORING REQUIREMENTS

1. **MONITORING AND REPORTING shall apply to both Discharge Area and Reference Area as defined in the following chart:**

PARAMETER	WETLAND COMPONENT		
	FLORA	SEDIMENT	SURFACE WATER
Species Classification	P		
Percentage of Whole Cover (for each species)	P		
Growth Studies	A_1		
Water Stage			M
Metals Analysis: Mg, Pb, Cd, Cr, Cu, Zn, Fe, Ni, Ag, Se	P_1	P_1	P
Nutrient Analysis I: TKN, TP	$P_{1,2}$	$P_{1,2}$	Q
Nutrient Analysis II: NH_3N, NO_2N, NO_3N, PO_4		P_1	Q
Others: BOD_5, TSS, pH, Dissolved Oxygen			P_1
Accretion Rate		P	

SPECIES CLASSIFICATION

Within the three Discharge Area sites of each wetland and within the two (2) Reference Area sites, three or more 10 x 100 m quadrates should be established. These plots must be oriented perpendicular to the hydrological gradient. All trees within these subplots with a diameter at breast height (dbh) greater than 3.2 cm should be tagged with an identification number.

The relative importance of each major tree species in both the Discharge and Reference Areas will be based on the density (total number), dominance (basal area), and frequency of occurrence in each of the plots using equations 1-4 (Barbour et al. 1987).

Relative density = (individuals of a species)/(total individuals of all species) (1)
Relative dominance = (total basal area of a species)/(total basal area of all species) (2)
Relative frequency = (frequency of species)/(total frequency of all species in area) (3)
Importance Value = Relative density + Relative dominance + Relative Frequency (4)

PERCENTAGE OF WHOLE COVER and GROWTH STUDIES

Forested Wetland Production

Productivity of a forested wetland is defined as the sum of stem growth (perennial productivity) and leaf and fruit fall (ephemeral productivity). Above-ground net primary productivity (NPP) should be calculated as the sum of ephemeral and perennial productivity, and presented as live dry weight per square meter per year basis ($g/m^2/yr$).

OTHER REQUIREMENTS (cont.)

Perennial productivity should be calculated using diameter at breast height (dbh) measurements of all trees with dbh greater than 3.2 cm within the subplots defined above. Measurements of dbh should be taken during two consecutive winters when trees are dormant, and biomass calculated using allometric equations (Megonigal et al. 1997; Scott et al. 1985). The following steps should be used to calculate perennial productivity:

- Estimate biomass (in kg) from dbh using allometric equations (see Table 1 below).
- Sum biomass per study site and divide by area (in kg/m^2) of the study site. This calculates the biomass per unit area (kg/m^2) for each year and study site.
- Subtract Year 1 biomass (kg/m^2) from Year 2 biomass, and multiply by 1000. This calculates the perennial productivity as $g/m^2/yr$.

Table 1. Regression equations used to convert diameter at breast height (DBH) measurements to overall perennial biomass. All equations are in the form: Biomass = f (DBH), where biomass is in kg, DBH is in cm and f is the parameterized function.

Species	Biomass f(D)	DBH Range	Reference
Fraxinus spp.	Biomass (kg) = ((2.669*((DBHcm*0.394)^1.16332))*0.454	>10 cm	Megonigal et al. '97
Taxodium distichum	Biomass (kg) = 10^(-.97+2.34*LOG10(DBHcm))	>10 cm	Megonigal et al. '97
Nyssa aquatica	Biomass (kg) = 10^(-919+2.291*LOG10(DBHcm))	>10 cm	Megonigal et al. '97
Acer rubrum	Biomass (kg) = ((2.39959*((DBHcm*0.394)^2)^1.2003))*0.454	10-28 cm	Megonigal et al. '97
Quercus nigra	Biomass (kg) = ((3.15067*((DBHcm*0.394)^2)^1.21955))*0.45	10-28 cm	Megonigal et al. '97
	Biomass (kg) = ((5.99898*((DBHcm*0.394)^2)^1.08527))*0.45	>28 cm	Megonigal et al. '97
Salix spp.	Biomass (kg) = 10^(-1.5+2.78*LOG10(DBHcm))	n.a.	Scott et al. 1985
Other Species	Biomass (kg) = ((2.54671*((DBHcm*0.394)^2)^1.20138))*0.45	10-28 cm	Megonigal et al. '97
	Biomass (kg) = ((1.80526*((DBHcm*0.394)^2)^1.27313))*0.45	>28 cm	Megonigal et al. '97

Ephemeral productivity should be measured using 0.25 m^2 leaf litter boxes, with screened bottoms and approximately 10 cm wide sides. Six boxes should be placed randomly in each of the 10 x 100 m quadrates within the Discharge Area and Reference Area. Leaves and other materials that collect in the boxes should be gathered bimonthly, separated into leaves and woody material, dried to a constant weight, and weighed. Ephemeral productivity should be calculated by summing the dried weight of leaves from each box over one year and extrapolating to $g/m^2/yr$.

Net Primary Production: Aboveground net primary production (NPP) will be calculated as the sum of leaf litter and wood protection, and will be given in $g/m^2/yr$.

Marsh Vegetation Production

Net production in areas dominated by non-woody herbaceous vegetation will be determined by end of season live (EOSL) biomass analysis. Sampling should be conducted during the last week of September or the first week of October. At least five 0.6 m^2 clip plots will be taken at each location using randomly placed quadrants. Vegetation within the quadrant will be cut as close to the surface as possible, stored in labeled paper bags, brought back to the laboratory, and refrigerated until processing. Live material will be separated from dead, and dried at 60° C to a constant weight. All data will be presented on a live dry weight per square meter basis (g dry wt m^{-2}).

WATER STAGE

Water stage is a gauged measurement of the water depth, which will assist in determining stress in the wetlands from hydrologic loadings and will determine the existence of a zone of influence resulting from wastewater applications.

OTHER REQUIREMENTS (cont.)

The zone around the discharge serves to assimilate the wastewater most effectively. This zone grows larger as wastewater continues to be discharged and the assimilative capacity of the immediate area becomes saturated. The water stage at set points within each of the three (3) Discharge Area sites and the two (2) Reference Area sites shall be measured monthly.

METALS, NUTRIENT I, NUTRIENT II, AND OTHER ANALYSIS

Samples of the flora, sediment, and surface water at each of the three (3) Discharge Area sites of each wetland and the two (2) Reference Area sites shall be collected and analyzed for the following metals and nutrients: Magnesium, Lead, Cadmium, Chromium, Copper, Zinc, Iron, Nickel, Silver, Selenium, Total Kjeldal Nitrogen, and Total Phosphorus.

Samples of the sediment and surface water at each of the three (3) Discharge Area sites of each wetland and the two (2) Reference Area sites shall be collected and analyzed for the following nutrients: Ammonia-Nitrogen, Nitrite Nitrogen, Nitrate Nitrogen, and Phosphate.

Samples of the surface water at each of the three (3) Discharge Area sites of each wetland and the two (2) Reference Area sites shall be collected and analyzed for the following parameters: Biochemical Oxygen Demand (BOD_5), Total Suspended Solids, pH, and Dissolved Oxygen.

Sampling procedures to be used during the wetland monitoring phase.

Water quality analyses must be conducted according to test procedures approved under 40 CFR Part 136.

For soils/sediments, sample preservation, handling, and analysis must meet the specifications of the Test Methods for Evaluating Solid Waste Physical/Chemical Methods, third edition (EPA Publication Number SW-846, 1986, or most recent revision) or an equivalent substitute as approved by the administrative authority.

ACCRETION RATES

Accretion rates will provide an indication of the how the effluent is contributing sediment and organic matter into the wetland area. Feldspar markers will be laid on the wetland surface in each of the three (3) Discharge Area sites and the two (2) Reference Area sites, with each plot having three 0.25 m^2 subplots where 1 cm thick powdered feldspar clay will be placed (Cahoon and Turner 1989). The subplots will be marked at each corner with PVC poles. Every four years, the thickness of material deposited on top of the feldspar marker at one subplot of each plot will be measured destructively by taking a 20 cm x 20 cm plug using a shovel or trowel, cleanly slicing the core into several sections to reveal the horizon, then measuring the thickness of material above the surface of the horizon at 10 different locations. The rate of vertical accretion will be calculated by dividing the mean thickness of material above the surface of the horizon by the amount of time the horizon had been in place.

NUTRIA CONCERNS

Evidence has shown that nutria, which can be detrimental to a marsh wetland, may be highly attracted to the high protein levels caused by high levels of nutrients in the water being sprayed onto the wetland assimilation site. Therefore, the permittee shall conduct an assessment of the nutria impact on the assimilation site. An example to consider is to establish anti-nutria enclosures within the wetland assimilation site and compare the vegetation growth within the enclosure versus outside the enclosure. A summary of the assessments shall be recorded in the annual wetland monitoring report.

OTHER REQUIREMENTS (cont.)

The **Discharge Area** is defined as the area of wetlands directly affected by effluent addition, and is inclusive of the delineated assimilation area.

The **Reference Area** is defined as wetland area that is nearby and similar to the Discharge Area, but that is not affected by effluent addition.

Water quality will be monitored by taking water samples from the monitoring sites along the path of flow of the effluent in the Discharge Area and from one or more Reference Area sites.

Compared to data from the Use Attainability Analysis and the Reference Areas, the effects of the discharge on the biological integrity (as defined above) may be accurately assessed.

Sampling in the **DISCHARGE AREA** must be conducted as follows:

For both the Chinchuba Swamp and the East Tchefuncte Marsh, collection of a minimum of three samples per site in each of the three sites: 1) Near Site, 2) Mid Site, and 3) Out Site. Locations of each of these sites is as follows:

Discharge Area of Chinchuba Swamp:

Near Site: Latitude 30° 22′ 27.51″ North
Longitude 90° 6′ 7.2″ West

Mid Site: Latitude 30° 22′ 13.59″ North
Longitude 90° 6′ 41.24″ West

Out Site: Latitude 30° 22′ 5.11″ North
Longitude 90° 7′ 2.85″ West

Discharge Area of the East Tchefuncte Marsh:

Near Site: Latitude 30° 23′ 26.47″ North
Longitude 90° 7′ 16.7″ West

Mid Site: Latitude 30° 23′ 0.2″ North
Longitude 90° 7′ 45.12″ West

Out Site: Latitude 30° 22′ 44.45″ North
Longitude 90° 8′ 8.09″ West

Exception: Only one sample per site in each of the three sites for those samples collected quarterly.

Sampling in the **REFERENCE AREA** must be conducted as follows:

Collection of a minimum of three samples in each Reference Area. All three samples will be taken from a site or sites similar to the Discharge Area in the receiving stream. The location of the Reference Areas are as follows:

OTHER REQUIREMENTS (cont.)

Reference Area #1: Mandeville Tchefuncte Marsh Control Site (Reference area for the East Tchefuncte Marsh)

Coordinates: Latitude 30° 23′ 2.72″ North
Longitude 90° 9′ 46.25″ West

Reference Area #2: Mandeville Bayou Castine Control Site (Reference area for Chinchuba Swamp)

Coordinates: Latitude 30° 21′ 6.03″ North
Longitude 90° 2′ 11.45″ West

Exception: Only one sample per site in the Reference Area for those samples collected quarterly.

A: ANNUALLY. Sample once per year at all three (3) DISCHARGE AREA sites of each wetland and the two (2) REFERENCE AREA sites and included in the yearly report.
A_1 – Stem growth and litter fall.

M: MONTHLY. Samples should be taken at all three (3) DISCHARGE AREA sites of each wetland and the two (2) REFERENCE AREA sites each month and include in the yearly report.

P: PERIODICALLY. Sampling must be made once during September through November in the fourth year of the permit period for all three (3) DISCHARGE AREA sites of each wetland and the two (2) REFERENCE AREA sites. Please note footnote P_2 for an exception to the monitoring period.

P_1 – Sample preservation, handling, and analysis must meet the specifications of the Test Methods for Evaluating Solid Waste Physical/Chemical Methods, third edition (EPA Publication Number SW-846, 1986, or most recent revision) or an equivalent substitute as approved by the administrative authority.

P_2 – Sampling to be conducted in summer to reflect peak growth.

Q: QUARTERLY. Sampling (one sample collected per site) must be made every three months annually for all three (3) DISCHARGE AREA sites of each wetland and the two (2) REFERENCE AREA sites.

Parameters are to be sampled and monitored for the specified wetland component at all Discharge Areas and the Reference Areas.

WETLAND MONITORING REPORT REQUIREMENT SCHEDULE	
REPORT	DUE DATE
Annual Wetland Monitoring Report[1]	**NO LATER THAN** 30 days from one (1) year from the effective date of the permit
Annual Wetland Monitoring Report[1]	**NO LATER THAN** 30 days from two (2) years from the effective date of the permit
Annual Wetland Monitoring Report[1]	**NO LATER THAN** 30 days from three (3) years from the effective date of the permit

OTHER REQUIREMENTS (cont.)

Annual Wetland Monitoring Report[1] and the Fourth Year Wetland Monitoring Report[2]	**NO LATER THAN** 30 days from four (4) years from the effective date of the permit
Annual Wetland Monitoring Report[1]	**NO LATER THAN** 30 days from five (5) years from the effective date of the permit

[1] Annual Wetland Monitoring Report **must be submitted on the attached forms** and shall consist of:

Parameter	Wetland Component
Growth Studies (Stem Growth & Litter Fall)	Flora
Water Stages	Surface Water
Metal Analysis	Effluent Water
Nutrient Analysis I	Surface Water
Nutrient Analysis II	Surface Water
Other Parameters	Surface Water

[2] Fourth Year Wetland Monitoring Report **must be submitted on the attached forms** and shall consist of:

Parameter	Wetland Component
Species Classification	Flora
Percentage of Whole Cover	Flora
Metal Analysis	Flora, Sediment, & Surface Water
Nutrient Analysis I	Flora & Sediment
Nutrient Analysis II	Sediment
Accretion	Sediment

In the event that a permit is not reissued in a timely manner, the Annual Wetland Monitoring Report shall be submitted for the years following the expiration date of the permit and shall be due 30 days after the anniversary of the effective date of this permit.

A copy of each report required by this permit shall be submitted to the Permits Compliance Unit, and shall also be submitted to the Water Permits Division and Water Quality Assessment Division at the following addresses:

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attention: Permit Compliance Unit

OTHER REQUIREMENTS (cont.)

Louisiana Department of Environmental Quality
Office of Environmental Services
Water Permits Division
Municipal and General Water Permits Section
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

Louisiana Department of Environmental Quality
Office of Environmental Assessment
Water Quality Assessment Division
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

In addition, enforcement authority has been retained by EPA. Therefore, EPA must also be notified according to the provisions above until notification that enforcement authority has been assumed by LDEQ. The written report shall be submitted to the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

2. **If wetland monitoring shows that there is:**

- **MORE THAN A 20% REDUCTION IN FORESTED WETLAND PRODUCTION; OR**
- **MORE THAN A 20% REDUCTION IN MARSH VEGETATION PRODUCTION; OR**
- **SIGNIFICANT* DECREASE IN THE DOMINANCE INDEX OR STEM DENSITY OF BALD CYPRESS**

then, within 180 days of a decrease in any of the above required biological criteria, the permittee shall develop a study and test procedures to determine the origination of the cause. A determination shall be made to indicate whether or not the impact to the natural wetland was caused by the effluent. The permittee must demonstrate to the Department what has caused the problem within 9 months of the decrease in any of the above required biological criteria and develop a comprehensive plan for the expeditious elimination and prevention of such cause. The plan shall be implemented within 90 days of the determination of the cause. The plan shall provide specific corrective actions to be taken to achieve compliance with the above biological criteria within the shortest period of time. In addition, the permittee shall submit the following with the Discharge Monitoring Report in the months of January, April, July and October:

i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity;
iii. any data which identifies effluent toxicity control mechanisms or measures that could be installed or implemented which would reduce or remove the effluent toxicity; and steps taken or proposed to be taken to prevent such violation(s) from recurring.

In addition, **if studies and tests indicate that the impact to the natural wetland was caused by the effluent, then this permit may be reopened to include appropriate limitations and conditions to ensure protection of water quality standards.**

OTHER REQUIREMENTS (cont.)

**Note: One-way analysis of variance analysis will be carried out to compare treatment and control area parameters using statistical software. An alpha probability level of <0.05 will be used to define a significant difference. Comparisons of means with significant ANOVA tests will be made using Tukey-Kramer Honestly Significant Difference (HSD) test (Sall and Lehman 1996). Other statistical tests may be authorized by LDEQ as appropriate.*

3. **If loading rates exceed 15 g/m^2/yr total nitrogen or 4 g/m^2/yr total phosphorus, then either the loading rates must be reduced or the assimilation area must be increased.**

Suggestions for sampling during the wetland monitoring can be found in *The Use of Louisiana Swamp Forests for Application of Treated Municipal Wastewater: Standard Operating Procedures for Monitoring the Effects of Effluent Discharge.* John W. Day, Jr., Joel Lindsey, Jason N. Day, and Robert R. Lane, Comite Resources, Inc. (Used with the permission of Dr. John W. Day, Jr., March 14, 2003)

OTHER REQUIREMENTS (cont.)

SECTION F. WHOLE EFFLUENT TOXICITY LIMITS (7- DAY CHRONIC NOEC: FRESHWATER)

It is unlawful and a violation of this permit for a permittee or the designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by the Louisiana Department of Environmental Quality.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	**001**
REPORTED ON DMR AS OUTFALL:	**TX1**
CRITICAL DILUTION:	**98%**
EFFLUENT DILUTION SERIES:	**31%, 42%, 55%, 74%, and 98%**
SAMPLE TYPE:	**24-Hour Composite**
TEST SPECIES/METHODS:	**40 CFR Part 136**

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013, or the most recent update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The survival NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. The NOEC for growth or reproduction is defined as the greatest effluent dilution at and below which sub-lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. Lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.

2. PERSISTENT LETHAL and/or SUB-LETHAL EFFECTS

The requirements of this section apply only when a toxicity test demonstrates significant lethal and/or sub-lethal effects at or below the critical dilution.

OTHER REQUIREMENTS (cont.)

If any valid test demonstrates significant lethal or sub-lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the term of the permit.

a. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates statistically significant lethal or sub-lethal toxic effects at the critical dilution or lower effluent dilutions. The additional tests shall be conducted monthly during the next three consecutive months in which a discharge occurs to determine if toxicity is persistent or occurs on a periodic basis. The purpose of this testing is to determine whether toxicity is present at a level and frequency that will provide toxic sample results to use in performing a Toxicity Reduction Evaluation (TRE). If no additional test failures occur during the retest monitoring period, the testing frequency will be once per quarter for the term of the permit or until another test failure occurs. The permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

b. IF LETHAL EFFECTS HAVE BEEN DEMONSTRATED: If any of the valid additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

c. IF ONLY SUB-LETHAL EFFECTS HAVE BEEN DEMONSTRATED: If any two of the three valid additional tests demonstrate significant sub-lethal effects at 75% effluent dilution or lower, the permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements (emphasizing investigations pertaining to sub-lethal toxicity) as specified in Item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the second failed retest. A TRE concentrating on sub-lethal effects may also be required for failure to perform the required tests.

d. The provisions of item 2.a are suspended upon submittal of the **TRE Action Plan**.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.

iii. 60% of the surviving control females must produce three broods.

iv. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0%

OTHER REQUIREMENTS (cont.)

effluent) must be 0.25 mg per larva or greater.

v. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.

vi. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

i. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA-821-R-02-013, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

ii. For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-013, or the most recent update thereof.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and alkalinity to the closest downstream perennial water for;

A. toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

B. toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

A. a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;

OTHER REQUIREMENTS (cont.)

B. the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

C. the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4 below; and

D. the synthetic dilution water shall have a pH, hardness and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect second and third 24-hour composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.

iv. If the 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 during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When 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 4 of this section.

4. **REPORTING**

a. A valid test must be completed and test results must be submitted for each species during each Monitoring Period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA-821-R-02-013, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to the following address:

OTHER REQUIREMENTS (cont.)

Department of Environmental Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

In addition, if enforcement authority has been retained by EPA, a copy of the report must also be submitted to the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

b. The permittee shall submit the results of each valid toxicity test on the DMR for that Monitoring Period in accordance with Part III. D.4 and the DMR Monitoring Period schedule contained in Part II of this permit. Submit retest information clearly marked as such on the DMR for the Monitoring Period in which the retest occurred. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 Summary Sheet with each valid test.

i. Pimephales promelas (Fathead Minnow)

A. If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.

B. Report the NOEC value for survival, Parameter No. TOP6C.

C. Report the NOEC value for growth, Parameter No. TPP6C.

D. If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.

E. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia

A. If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.

B. Report the NOEC value for survival, Parameter No. TOP3B.

C. Report the NOEC value for reproduction, Parameter No. TPP3B.

D. If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.

E. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No.

OTHER REQUIREMENTS (cont.)

TQP3B.

iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that Monitoring Period.

A. Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

Retest #1 (STORET 22418): If the first monthly retest following failure of a routine test for either test species results in an NOEC for growth or reproduction that is less than the critical dilution, report a "1"; otherwise, report a "0".

B. Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

Retest #2 (STORET 22419): If the second monthly retest following failure of a routine test for either test species results in an NOEC for growth or reproduction that is less than the critical dilution, report a "1"; otherwise, report a "0".

C. Retest #3 (STORET 51443): If the third monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

Retest #3 (STORET 51444): If the third monthly retest following failure of a routine test for either test species results in an NOEC for growth or reproduction that is less than the critical dilution, report a "1"; otherwise, report a "0".

If, for any reason, a retest cannot be performed during the Monitoring Period in which the triggering routine test failure is experienced, the permittee shall report it on the following Monitoring Period's DMR, and the comments section of the DMRs shall be annotated to that effect. If retesting is not required during a given Monitoring Period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Table 1 of this permit with the DMR subsequent to each and every toxicity test Monitoring Period. The DMR and the summary table should be sent to the address indicated in 4.a.

5. TOXICITY REDUCTION EVALUATION (TRE)

a. The permittee shall submit a **Toxicity Reduction Evaluation (TRE) Action Plan and Schedule** for conducting a TRE for the following:

i. If lethal effects have been demonstrated: within (90) days of confirming lethality in any retest; or

ii. If only sub-lethal effects have been demonstrated: within (90) days of confirming sub-lethality at 75% effluent dilution or lower in any two out of three retests.

OTHER REQUIREMENTS (cont.)

The **TRE Action Plan** shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent requirements and/or chemical-specific limits by reducing an effluent's toxicity (includes sub-lethal toxicity, if applicable) to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent lethal and/or sub-lethal toxicity and/or treatment methods which will reduce the effluent toxicity. The **TRE Action Plan** shall lead to the successful elimination of effluent lethal and/or sub-lethal toxicity at the critical dilution and include the following:

i. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003)** and **"Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005)**, or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080)** and **"Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081)**, as appropriate;
The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at 1-800-553-6847, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each 24-hour composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual 24-hour composite samples, for the chemical specific analysis;

iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).

b. The permittee shall initiate the **TRE Action Plan** within thirty (30) days of plan and schedule submittal. The

OTHER REQUIREMENTS (cont.)

permittee shall assume all risks for failure to achieve the required toxicity reduction.

c. The permittee shall submit a quarterly **TRE Activities Report**, with the Discharge Monitoring Report in the months of January, April, July, and October, containing information on toxicity reduction evaluation activities including:

i. any data and/or substantiating documentation which identify the pollutant(s) and/or source(s) of effluent lethal and/or sub-lethal toxicity;

ii. any studies/evaluations and results on the treatability of the facility's effluent lethal and/or sub-lethal toxicity; and

iii. any data which identify effluent toxicity control mechanisms that will reduce effluent toxicity to achieve compliance with permit biomonitoring requirements and/or chemical-specific limits.

The **TRE Activities Report** shall be submitted to the following addresses:

Department of Environmental Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch
1445 Ross Avenue
Dallas, Texas 75202

d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality and/or sub-lethality (if applicable) in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in the permittee achieving compliance with permit biomonitoring requirements and/or chemical-specific limits. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

e. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. At the end of the TRE, LDEQ will consider all information submitted and establish appropriate controls to prevent future toxic discharges, including WET and/or chemical-specific limits per state regulations at LAC 33:IX.2707.D.1.e.

OTHER REQUIREMENTS (cont.)

WHOLE EFFLUENT TOXICITY TESTING (48 HR ACUTE NOEC: FRESHWATER)

It is unlawful and a violation of this permit for a permittee or the designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by the Louisiana Department of Environmental Quality.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	**002 & 003 combined**
REPORTED ON DMR AS OUTFALL:	**TX2**
CRITICAL DILUTION:	**100%**
EFFLUENT DILUTION SERIES:	**32%, 42%, 56%, 75%, and 100%**
SAMPLE TYPE:	**24-Hour Composite**
TEST SPECIES/METHODS:	**40 CFR Part 136**

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test using EPA-821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. Test failure is defined as a demonstration of statistically significant lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

If any valid test demonstrates significant lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the term of the permit.

OTHER REQUIREMENTS (cont.)

a. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates statistically significant lethal toxic effects at the critical dilution or lower effluent dilutions. The additional tests shall be conducted monthly during the next three consecutive months in which a discharge occurs to determine if toxicity is persistent or occurs on a periodic basis. The purpose of this testing is to determine whether toxicity is present at a level and frequency that will provide toxic sample results to use in performing a Toxicity Reduction Evaluation (TRE). If no additional test failures occur during the retest monitoring period, the testing frequency will be once per quarter for the term of the permit or until another test failure occurs. The permittee may substitute one of the additional tests in lieu of one routine toxicity test.. A full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

b. If any of the valid additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

c. The provisions of item 2.a are suspended upon submittal of the **TRE Action Plan**.

3. **REQUIRED TOXICITY TESTING CONDITIONS**

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.

ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the Daphnia pulex survival test and Fathead minnow survival test.

iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for the Daphnia pulex survival test and Fathead minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Daphnia pulex survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-012, or the most recent update thereof.

OTHER REQUIREMENTS (cont.)

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;

A. toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

B. toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

A. a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;

B. the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);

C. the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4 below; and

D. the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect two flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect a second 24-hour composite sample for use during the 24-hour renewal of each dilution concentration for both tests. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.

OTHER REQUIREMENTS (cont.)

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

iv. If the 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 during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate 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 4 of this section.

4. **REPORTING**

a. A valid test must be completed and test results must be submitted for each species during each Monitoring Period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA-821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:

Department of Environmental Quality
Office of Environmental Compliance
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

In addition, if enforcement authority has been retained by EPA, a copy of the report must also be submitted to the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

b. The permittee shall submit the results of each valid toxicity test on the DMR for that Monitoring Period in accordance with Part III D.4 and the DMR Monitoring Period schedule contained in Part II of this permit. Submit retest information clearly marked as such on the DMR for the Monitoring Period in which the retest occurred. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 Summary Sheet with each valid test.

i. Pimephales promelas (Fathead minnow)

A. If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM6C.

OTHER REQUIREMENTS (cont.)

B. Report the NOEC value for survival, Parameter No. TOM6C.

C. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM6C.

ii. Daphnia pulex

A. If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.

B. Report the NOEC value for survival, Parameter No. TOM3D.

C. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.

iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that Monitoring Period.

A. Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

B. Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

C. Retest #3 (STORET 51443): If the third monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

If, for any reason, a retest cannot be performed during the Monitoring Period in which the triggering routine test failure is experienced, the permittee shall report it on the following Monitoring Period's DMR, and the comments section of the DMRs shall be annotated to that effect. If retesting is not required during a given Monitoring Period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Table 1 of this permit with the DMR subsequent to each and every toxicity test Monitoring Period. The DMR and the summary table should be sent to the address indicated in 4.a.

5. TOXICITY REDUCTION EVALUATION (TRE)

a. Within ninety (90) days **of confirming lethality in any retest**, the permittee shall submit a **Toxicity Reduction Evaluation (TRE) Action Plan and Schedule** for conducting a TRE. The **TRE Action Plan** shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent requirements and/or chemical-specific limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment

OTHER REQUIREMENTS (cont.)

methods which will reduce the effluent toxicity. The **TRE Action Plan** shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

i. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003)** and **"Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005)**, or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080)** and **"Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081)**, as appropriate;

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at 1-800-553-6847, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 24 hours of test initiation, each 24-hour composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual 24-hour composite samples, for the chemical specific analysis;

iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).

b. The permittee shall initiate the **TRE Action Plan** within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.

c. The permittee shall submit a quarterly **TRE Activities Report**, with the Discharge Monitoring Report in the months of January, April, July, and October, containing information on toxicity reduction evaluation activities including:

OTHER REQUIREMENTS (cont.)

i. any data and/or substantiating documentation which identify the pollutant(s) and/or source(s) of effluent toxicity;

ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and

iii. any data which identify effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to achieve compliance with permit biomonitoring requirements and/or chemical-specific limits.

The **TRE Activities Report** shall be submitted to the following addresses:

Department of Environmental Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch
1445 Ross Avenue
Dallas, Texas 75202

d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in the permittee achieving compliance with permit biomonitoring requirements and/or chemical-specific limits. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

e. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. At the end of the TRE, LDEQ will consider all information submitted and establish appropriate controls to prevent future toxic discharges, including WET and/or chemical-specific limits per state regulations at LAC 33:IX.2707.D.1.e.

TABLE 1
SUMMARY SHEET
Ceriodaphnia dubia SURVIVAL AND REPRODUCTION TEST

PERMITTEE:_____
FACILITY SITE:_____
LPDES PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?
_____Yes _____No

PERCENT SURVIVAL - Ceriodaphnia

TIME OF READING	PERCENT EFFLUENT					
	0 %	%	%	%	%	%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW SUB-LETHALITY:

Is the mean number of young produced per female at 7 days significantly less (p=0.05) than the control's number of young per female for the low-flow or critical dilution? _____Yes _____No

NUMBER OF YOUNG PRODUCED PER FEMALE @ 7 DAYS - Ceriodaphnia

REPLICATE	PERCENT EFFLUENT					
	0 %	%	%	%	%	%
A B C D E F G H I J						
Mean No. of young						
CV%*						

* Coefficient of variation = Standard Deviation * 100/mean

3. Are the test results to be considered valid? _____Yes _____No
If _X_ no (test invalid) , what reasons for invalidity?

4. Is this a retest of a previous invalid test? _____Yes _____No
Is this a retest of a previous test failure?. _____Yes _____No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Ceriodaphnia:

a. NOEC SURVIVAL = _____% effluent

b. NOEC REPRODUCTION = _____% effluent

TABLE 1
SUMMARY SHEET
Pimephales promelas ("fathead minnow") SURVIVAL AND GROWTH TEST

PERMITTEE:_____
FACILITY SITE:_____
LPDES PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?
_____Yes _____No

PERCENT SURVIVAL - Pimephales

PERCENT EFFLUENT	% SURVIVAL / REPLICATES				MEAN % SURVIVAL			CV %
	A	B	C	D	24-HR	48-HR	7 DAY	
0%								
%								
%								
%								
%								
%								

2. LOW-FLOW SUB-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution? _____Yes _____No

DATA TABLE FOR GROWTH - Pimephales

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
%							
%							
%							
%							
%							

* Coefficient of variation = standard deviation x 100/mean

3. Are the test results to be considered valid? _____Yes _____No
   If _X_no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test? _____Yes _____No
   Is this a retest of a previous test failure? _____Yes _____No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Pimephales:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Daphnia pulex ACUTE SURVIVAL TEST RESULTS

PERMITTEE:_____
FACILITY SITE:_____
NPDES PERMIT NUMBER:_____ WP PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. LOW-FLOW LETHALITY:

Is the mean survival at 48 hours significantly less (p=0.05) than the control survival for the low flow or critical dilution?

_____Yes _____No

DILUTION SERIES RESULTS – Daphnia pulex

TIME OF READING	REP	0%	0.7%	1.0%	1.3%	1.8%	2.4%
24-HOUR							
48-HOUR							
MEAN							

2. Are the test results to be considered valid? _____Yes _____No
   If _X_no (test invalid) , what reasons for invalidity?

3. Is this a retest of a previous invalid test? _____Yes _____No
   Is this a retest of a previous test failure? _____Yes _____No

4. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Daphnia pulex:

NOEC _____% EFFLUENT

$LC_{50}48$ _____% EFFLUENT

TABLE 1
SUMMARY SHEET
Pimephales promelas ("fathead minnow") ACUTE SURVIVAL TEST

PERMITTEE:_____
FACILITY SITE:_____
NPDES PERMIT NUMBER:_____ WP PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. LOW-FLOW LETHALITY:

Is the mean survival at 48 hours days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____Yes _____No

DILUTION SERIES RESULTS – Pimephales promelas

TIME OF READING	REP	0%	0.7%	1.0%	1.3%	1.8%	2.4%
24-HOUR							
48-HOUR							
MEAN							

3. Are the test results to be considered valid? _____Yes _____No
If _X_no (test invalid) , what reasons for invalidity?

4. Is this a retest of a previous invalid test? _____Yes _____No
Is this a retest of a previous test failure? _____Yes _____No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Pimephales:

a. NOEC _____% effluent
b. $LC_{50}48$ _____% effluent

PART III
STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction
   In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions
   a. LA. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

   b. Any person may be assessed an administrative penalty by the State Administrative Authority under LA. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants
   a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

   b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply
   a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action
This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

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 f acts, or the permittee's misrepresentation of any relevant facts at any time;

c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge; or

e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;

f. Change of ownership or operational control;

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.

7. Property Rights
This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information
The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority 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 state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability
Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

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

11. 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 Clean Water Act.

12. Severability
If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution
A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies
In accordance with La R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Department of Health and Hospitals state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Department of Health and Hospitals state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Department of Health and Hospitals.

SECTION B. PROPER OPERATION AND MAINTENANCE

1. 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.

2. 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. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance
   a. 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 which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

   b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities
   a. ***Bypass***. The intentional diversion of waste streams from any portion of a treatment facility.

   b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

   c. Notice
      (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, 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 LAC 33:IX.2701.L.6, (24-hour notice) and Section D.6.e. of these standard conditions.

   d. Prohibition of bypass
      (1) Bypass is prohibited, and the state administrative authority 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 untreated 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 preventive maintenance; and,

         (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

      (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions
   a. Upset. 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.

   b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. 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.

   c. 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; and

      (3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances
Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal
For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry
The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the 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.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

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 or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection
(1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.
(2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling
Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records
Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), 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, and records of all data used to complete the application for 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 state administrative authority at any time.

4. Record Contents
Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were begun;
e. The individual(s) who performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The results of all quality control procedures.

5. Monitoring Procedures
a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of know precision and accuracy. All quality control measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the

"Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982 "U.S. Environmental Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503.

6. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
   a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.
   b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.
   c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties
   a. LA R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

   b. LA R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false 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 non compliance.

8. Additional Monitoring by the Permittee
If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, 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 or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements
Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation
   a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:
      (1) Submitted on behalf of any facility, as defined in R.S.30:2004;
      (2) Required as part of any permit application;
      (3) Required by order of the department;
      (4) Required to be included on any monitoring reports submitted to the department;
      (5) Required to be submitted by contractor
      (6) Otherwise required by department regulations.

b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under DIVISIONS → LABORATORY SERVICES at the following link:

http://www.deq.louisiana.gov

Questions concerning the program may be directed to (225) 219-9800.

SECTION D. REPORTING REQUIREMENTS

1. Facility Changes
The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
   a. 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 CFR 122.29(b); or

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.

   c. For Municipal Permits: Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance
The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under LAC 33:IX.2903. A.2.b), or a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

4. Monitoring Reports
Monitoring results shall be reported at the intervals and in the form specified in Part I or Part II of this permit.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) on the form specified in the permit. Preprinted DMRs are provided to majors/92-500's and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, LA 70821-4312

Copies of blank DMR templates, plus instructions for completing them, and EPA's LPDES Reporting Handbook are available at the department website located at:

http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2276

5. 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.

6. Requirements for Notification

a. Emergency Notification
As required by LAC 33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification
As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the department within 24 hours after learning of the discharge. Notification should be made to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, prompt notification shall be provided within a time frame not to exceed 24 hours and shall be given to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) as follows:

(1) by the Online Incident Reporting screens found at http://www3.deq.louisiana.gov/surveillance/irf/forms/ ;or

(2) by e-mail utilizing the Incident Report Form and instructions found at http://www.deq.louisiana.gov/portal/Default.aspx?tabid=279;or

(3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:

(1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;

(2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;

(3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;

(4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;

(5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;

(6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, Surveillance Division SPOC in accordance with LAC 33:IX.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

(1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;

(2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;

(3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;

(4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:

(a) the current permitted limit for the pollutant(s) released;and

(b) the permitted release point/outfall ID.

(5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);

(6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;

(7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.

(8) Written notification reports shall be submitted to the Office of Environmental Compliance, Surveillance Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT**."

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided 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. The following shall be included as information which must be reported within 24hours:
(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);

(2) Any upset which exceeds any effluent limitation in the permit;

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance
The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. 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 state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances
In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have 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:
   i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
      (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

   ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

b. 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:
   i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

      (1) Five hundred micrograms per liter (500 µg/L);
      (2) One milligram per liter (1 mg/L) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
      (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

   ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements
All applications, reports, or information submitted to the state administrative authority shall be signed and certified.
   a. All permit applications shall be signed as follows:
      (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
         (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
         (b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

      NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a.(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a.(1)(b) rather than to specific individuals.

      (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. For purposes of this section, a principal executive officer of a federal agency includes:
         (a) The chief executive officer of the agency, or
         (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

   b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
      (1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;

(2) 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, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the state administrative authority.

c. Changes to authorization. If an authorization under Section D.10.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 Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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."

11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

a. The name and address of any permit applicant or permittee;
b. Permit applications, permits, and effluent data.
c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal

a. Negligent Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under

the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties
The Louisiana Revised Statutes LA. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than $32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(**PLEASE NOTE**: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act 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. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.

3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.

6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health and Hospitals in accordance with R.S.49:1001 et seq.

7. 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 terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.

8. Daily Maximum discharge limitation means the highest allowable "daily discharge".

9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.

10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.

11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.

13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.

14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

15. LEQA means the Louisiana Environmental Quality Act.

16. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

17. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

18. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.

19. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that 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.

20. Sewage sludge means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; portable toilet pumpings, type III marine sanitation device pumpings (33 CFR part 159); and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

21. Stormwater Runoff—aqueous surface runoff including any soluble or suspended material mobilized by naturally occurring precipitation events.

22. Surface Water: all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction that are not part of a treatment system allowed by state law, regulation, or permit.

23. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)

24. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

25. The term MGD shall mean million gallons per day.

26. The term GPD shall mean gallons per day.

27. The term mg/L shall mean milligrams per liter or parts per million (ppm).

28. The term SPC shall mean Spill Prevention and Control. Plan covering the release of pollutants as defined by the Louisiana Administrative Code (LAC 33:IX.9).

29. The term SPCC shall mean Spill Prevention Control and Countermeasures Plan. Plan covering the release of pollutants as defined in 40 CFR Part 112.

30. The term µg/L shall mean micrograms per liter or parts per billion (ppb).

31. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

32. Visible Sheen: a silvery or metallic sheen, gloss, or increased reflectivity; visual color; or iridescence on the water surface.

33. Wastewater—liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.

34. Waters of the State: for the purposes of the Louisiana Pollutant Discharge Elimination system, all surface waters within the state of Louisiana and, on the coastline of Louisiana and the Gulf of Mexico, all surface waters extending there from three miles into the Gulf of Mexico. For purposes of the Louisiana Pollutant Discharge Elimination System, this includes all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2, and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, 33 U.S.C. 1251 et seq.

35. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

36. Sanitary Wastewater Term(s):

a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.

d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.

LOUISIANA

MUNICIPAL WATER POLLUTION PREVENTION

MWPP

Facility Name:	**City of Mandeville / Chinchuba Swamp & East Tchefuncte Marsh Wetland Assimilation**
LPDES Permit Number:	LA0038288
Agency Interest (AI) Number:	19420
Address:	
Parish:	
(Person Completing Form) Name:	
Title:	
Date Completed:	

INSTRUCTIONS

1. Complete only the sections of the Environmental Audit which apply to your wastewater treatment system. Leave sections that do not apply blank and enter a "0" for the point value.

2. Parts 1 through 7 contain questions for which points may be generated. These points are intended to communicate to the department and the governing body or owner what actions will be necessary to prevent effluent violations. Place the point totals from parts 1 through 7 on the Point Calculation page.

3. Add up the point totals.

4. Submit the Environmental Audit to the governing body or owner for review and approval.

5. The governing body must pass a resolution which contains the following items:

   a. The resolution or letter must acknowledge the governing body or owner has reviewed the Environmental Audit.

   b. This resolution must indicate <u>specific</u> actions, if any, will be taken to maintain compliance and prevent effluent violations. Proposed actions should address the parts where maximum or close to maximum points were generated in the Environmental Audit.

   c. The resolution should provide any other information the governing body deems appropriate.

Permit #: LA0038288

PART 1: INFLUENT FLOW/LOADINGS (all plants)

A. List the average monthly volumetric flows and BOD loadings received at your facility during the last reporting year.

Column 1 Average Monthly Flow (million gallons per day, MGD)		**Column 2** Average Monthly BOD5 Concentration (mg/l)		**Column 3** Average Monthly BOD5 Loading (pounds per day, lb/day)
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	
	x		x 8.34 =	

BOD loading = Average Monthly Flow (in MGD) x Average Monthly BOD concentration (in mg/l) x 8.34

B. List the design flow and design BOD loading for your facility in the blanks below. If you are not aware of these design quantities, refer to your Operation and Maintenance (O&M) Manual or contact your consulting engineer.

Design Flow, MGD:		x 0.90 =	
Design BOD, lb/day:		x 0.90 =	

Permit #: LA0038288

C. How many months did the monthly flow (Column 1) to the wastewater treatment facility (WWTF) exceed 90% of design flow? Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	0	0	0	0	5	5	5	5	5	5	5	5

Write 0 or 5 in the C point total box [ ] C Point Total

D. How many months did the monthly flow (Column 1) to the WWTF exceed the design flow? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	5	5	10	10	15	15	15	15	15	15	15	15

Write 0, 5, 10 or 15 in the D point total box [ ] D Point Total

E. How many months did the monthly BOD loading (Column 3) to the WWTF exceed 90% of the design loading? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	0	5	5	5	10	10	10	10	10	10	10	10

Write 0, 5,or 10 in the E point total box [ ] E Point Total

F. How many months did the monthly BOD loading (Column 3) to the WWTF exceed the design loading? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	10	20	30	40	50	50	50	50	50	50	50	50

Write 0, 10, 20, 30, 40 or 50 in the F point total box [ ] F Point Total

G. Add together each point total for C through F and place this sum in the box below at the right.

TOTAL POINT VALUE FOR PART 1: [ ] (max = 80)

Also enter this value or 80, whichever is less, on the point calculation table on page 16.

Permit #: LA0038288

PART 2: EFFLUENT QUALITY / PLANT PERFORMANCE

A. List the monthly average effluent BOD and TSS concentrations produced by your facility during the last reporting year.

Month	**Column 1** Average Monthly BOD (mg/l)	**Column 2** Average Monthly TSS (mg/l)

B. List the monthly average permit limits for your facility in the blanks below.

	Permit Limit		90% of Permit Limit
BOD, mg/l		x 0.90 =	
TSS, mg/l		x 0.90 =	

Permit #: LA0038288

C. Continuous Discharge to Surface Water.

i. How many months did the effluent BOD (Column 1) exceed 90% of the permit limits? Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	0	10	20	30	40	40	40	40	40	40	40	40

Write 0, 10, 20, 30 or 40 in the i point total box [ ] i Point Total

ii. How many months did the effluent BOD (Column 1) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	5	5	10	10	10	10	10	10	10	10	10	10

Write 0, 5, or 10 in the ii point total box [ ] ii Point Total

iii. How many months did the effluent TSS (Column 2) exceed 90% of the permit limits? Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	0	10	20	30	40	40	40	40	40	40	40	40

Write 0, 10, 20, 30 or 40 in the iii point total box [ ] iii Point Total

iv. How many months did the effluent TSS (Column 2) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12
points	0	5	5	10	10	10	10	10	10	10	10	10	10

Write 0, 5, or 10 in the iv point total box [ ] iv Point Total

v. Add together each point total for i through iv and place this sum in the box below at the right.

TOTAL POINT VALUE FOR PART 2: [ ] (max = 100)

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

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D. Other Monitoring and Limitations

i. At any time in the past year was there and exceedance of a permit limit for other pollutants such as: ammonia-nitrogen, phosphorus, pH, total residual chlorine, or fecal coliform?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

ii. At any time in the past year was there a "failure" of a Biomonitoring (Whole Effluent Toxicity) test of the effluent?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

iii. At any time in the past year was there an exceedance of a permit limit for a toxic substance?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

Permit #: LA0038288

PART 3: AGE OF THE WASTEWATER TREATMENT FACILITY

A. What year was the wastewater treatment facility constructed or last major expansion/ improvements completed?

Current Year	-	*Answer to A*	=	*Age in years*
_____		_____		_____

Enter Age in Part C below.

B. √ Check the type of treatment facility that is employed.

		FACTOR:
_____	Mechanical Treatment Plant (trickling filter, activated sludge, etc...) Specify Type: _____	2.5
_____	Aerated Lagoon	2.0
_____	Stabilization Pond	1.5
_____	Other Specify Type: _____	1.0

C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determine the total point value for Part 3.

TOTAL POINT VALUE FOR PART 3 =

_____ (*Factor*) x _____ (*Age*) = ☐ (max = 50)

Also enter this value or 50, whichever is less, on the point calculation table on page 16.

D. Please attach a schematic of the treatment plant.

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PART 4: OVERFLOWS AND BYPASSES

A.

i. List the number of times in the last year there was an overflow, bypass or unpermitted discharge of untreated or incompletely treated wastewater due to heavy rain:

_____ √ Check one box.

- ☐ 0 = 0 points
- ☐ 1 = 5 points
- ☐ 2 = 10 points
- ☐ 3 = 15 points
- ☐ 4 = 30 points
- ☐ 5 or more = 50 points

ii. List the number of bypasses, overflows or unpermitted discharges shown in A (i) that were within the collection system and the number at the treatment plant

Collection System: _____ Treatment Plant: _____

B.

i. List the number of times in the last year there was an overflow, bypass or unpermitted discharge of untreated or incompletely treated wastewater due to equipment failure, either at the treatment plant or due to pumping problems in the collection system:

_____ √ Check one box.

- ☐ 0 = 0 points
- ☐ 1 = 5 points
- ☐ 2 = 10 points
- ☐ 3 = 15 points
- ☐ 4 = 30 points
- ☐ 5 or more = 50 points

ii. List the number of bypasses, overflows or unpermitted discharges shown in B (i) that were within the collection system and the number at the treatment plant

Collection System: _____ Treatment Plant: _____

C. Specify whether the bypasses came from the city/village/town sewer system or from contract or tributary communities/sanitary districts, etc...

_____

D. Add the point values checked for A and B and place the total in the box below.

TOTAL POINT VALUE FOR PART 4: ☐ (max = 100)

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

E. List the person responsible (name and title) for reporting overflows, bypasses or unpermitted discharges to State and Federal authorities:

_____

Describe the procedure for gathering, compiling and reporting:

_____

Permit #: LA0038288

PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storage

How many months of sludge storage capacity does your facility have available, either on-site or off-site?

Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months	<2	2	3	4-5	>6
points	50	30	20	10	0

Write 0, 10, 20, 30 or 40 in the A point total box [ ] A Point Total

B. For how many months does your facility have access to (and approval for) sufficient land disposal sites to provide proper land disposal?

Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months	<2	6-11	12-23	24-35	>36
points	50	30	20	10	0

Write 0, 10, 20, 30 or 40 in the B point total box [ ] B Point Total

C. Add together the A and B point values and place the sum in the box below at the right:

TOTAL POINT VALUE FOR PART 5: [ ] (max = 100)

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

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PART 6: NEW DEVELOPMENT

A. Please provide the following information for the total of all sewer line extensions which were installed during the last year.

Design Population: _____

Design Flow: _____ MGD

Design BOD: _____ mg/l

B. Has an industry (or other development) moved into the community or expanded production in the past year, such that either flow or pollutant loadings to the sewerage system were significantly increased (5% or greater)?

√ Check one box. ☐ Yes = 15 points ☐ No = 0 points

If Yes, Please describe:

_____

_____

_____

List any new pollutants:

_____

_____

C. Is there any development (industrial, commercial or residential) anticipated in the next 2-3 years, such that either flow or pollutant loadings to the sewerage system could significantly increase?

√ Check one box. ☐ Yes = 15 points ☐ No = 0 points

If Yes, Please describe:

_____

_____

_____

List any new pollutants you anticipate:

_____

_____

D. Add together the point value checked in B and C and place the sum in the box below.

TOTAL POINT VALUE FOR PART 6: ☐ (max = 30)

Also enter this value or 30, whichever is less, on the point calculation table on page 16.

Permit #: LA0038288

PART 7: OPERATOR CERTIFICATION AND EDUCATION

A. What was the name of the operator-in-charge for the reporting year?

Name: _____

B. What is his or her certification number:

Cert.#: _____

C. What level of certification is the operator-in-charge required to have to operate the wastewater treatment facility?

Level Required: _____

D. What is the level of certification of the operator-in-charge?

Level Certified: _____

E. Was the operator-in-charge of the report year certified at least at the grade level required in order to operate this plant?

√ Check one box. ☐ Yes = 0 points ☐ No = 50 points

Write 0 or 50 in the E point total box ☐ E Point Total

F. Has the operator-in-charge maintained recertification requirements during the reporting year?

√ Check one box. ☐ Yes ☐ No

G. How many hours of continuing education has the operator-in-charge completed over the last two calendar years?

√ Check one box. ☐ > 12 hours = 0 points ☐ < 12 hours = 50 points

Write 0 or 50 in the G point total box ☐ G Point Total

H. Is there a written policy regarding continuing education an training for wastewater treatment plant employees?

√ Check one box. ☐ Yes ☐ No

Explain: _____

_____

I. What percentage of the continuing education expenses of the operator-in-charge were paid for:

By the permittee? _____ *By the operator?* _____

J. Add together the E and G point values and place the sum in the box below at the right.

TOTAL POINT VALUE FOR PART 7: ☐ (max = 100)

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

Permit #: LA0038288

PART 8: FINANCIAL STATUS

A. Are User-Charge Revenues sufficient to cover operation and maintenance expenses?

√ Check one box. ☐ Yes ☐ No *If No, How are O&M costs financed?*

B. What financial resources do you have available to pay for your wastewater improvements and reconstruction needs?

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PART 9: SUBJECTIVE EVALUATION

A. Collection System Maintenance

i. Describe what sewer system maintenance work has been done in the last year.

ii. Describe what lift station work has been done in the last year.

iii. What collection system improvements does the community have under construction for the next 5 years?

B. If you have ponds please answer the following questions: √ Check one box.

i.	*Do you have duckweed buildup in the ponds?*	☐ Yes	☐ No
ii.	*Do you mow the dikes regularly (at least monthly), to the waters edge?*	☐ Yes	☐ No
iii.	*Do you have bushes or trees growing on the dikes or in the ponds?*	☐ Yes	☐ No
iv.	*Do you have excess sludge buildup (> 1foot) on the bottom of any of your ponds?*	☐ Yes	☐ No
v.	*Do you exercise all of your valves?*	☐ Yes	☐ No
vi.	*Are your control manholes in good structural shape?*	☐ Yes	☐ No
vii.	*Do you maintain at least 3 feet of freeboard in all of your ponds?*	☐ Yes	☐ No
viii.	*Do you visit your pond system at least weekly?*	☐ Yes	☐ No

Permit #: LA0038288

C. Treatment Plants

i. Have the influent and effluent flow meters been calibrated in the last year?

☐ Yes ☐ No (√ Check one box.)

Influent flow meter calibration date(s) *Effluent flow meter calibration date(s)*

ii. What problems, if any, have been experienced over the last year that have threatened treatment?

iii. Is your community presently involved in formal planning for treatment facility upgrade?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

Permit #: LA0038288

D. Preventive Maintenance

i. Does your plant have a written plan for preventive maintenance on major equipment items?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

ii. Does this preventive maintenance program depict frequency of intervals, types of lubrication and other preventive maintenance tasks necessary for each piece of equipment?

☐ Yes ☐ No

iii. Are these preventive maintenance tasks, as well as equipment problems, being recorded and filed so future maintenance problems can be assured properly?

☐ Yes ☐ No

E. Sewer Use Ordinance

i. Does your community have a sewer use ordinance that limits or prohibits the discharge of excessive conventional pollutants (BOD, TSS or pH) or toxic substances to the sewer system from industries, commercial users and residences?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

ii. Has it been necessary to enforce?

√ Check one box. ☐ Yes ☐ No *If Yes, Please describe:*

iii. Any additional comments about your treatment plant or collection system? (Attach additional sheets if necessary.)

Permit #: LA0038288

POINT CALCULATION TABLE

	Actual Values	Maximum
Part 1: *Influent Flow/Loadings*	_____	80 points
Part 2: *Effluent Quality / Plant Performance*	_____	100 points
Part 3: *Age of WWTF*	_____	50 points
Part 4: *Overflows and Bypasses*	_____	100 points
Part 5: *Ultimate Disposition of Sludge*	_____	100 points
Part 6: *New Development*	_____	30 points
Part 7: *Operator Certification Training*	_____	100 points

TOTAL POINTS: [ ]

ATTACHMENT 3

SAMPLE MWPP RESOLUTION

Resolved that the village/town/city of _____ informs the Louisiana Department of Environmental Quality that the following actions were taken by _____ (governing body).

1. Resolved the Municipal Water Pollution Prevention Environmental Audit Report which is attached to this resolution.

2. Set forth the following actions necessary to maintain permit requirements contained in the Louisiana Pollution Discharge Elimination System (LPDES) permit, number LA_____ .

   (Please be specific in listing the actions that will be taken to address the problems identified in the audit report.)

   a.

   b.

   c.

   d.

   etc..

Passed by a majority/unanimous (circle one) vote of the _____ on_____ (date).

_____

_____

CLERK

WETLAND MONITORING & REPORTING REQUIREMENT FORMS

Wetland Monitoring & Reporting Requirements
Due each year on the effective day of the permit

LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES)

Wetland System Monitoring Requirement

for

City of Mandeville
Chinchuba Swamp and East Tchefuncte Marsh Wetland Assimilation Project

Permit Number: LA0038288

Agency Interest Number: AI 19420

Activity Number: PER20080001

Wetland Monitoring & Reporting Requirements
Due each year from the effective date of the permit

In the event that a permit is not reissued in a timely manner, the Annual Wetland Monitoring Report shall be submitted for the years following the expiration date of the permit and shall be due on the effective day of this permit, until a new permit is issued

Permit Year: 1 2 3 4 5
(circle one)

Date: _____

ANNUAL WETLAND MONITORING & REPORTING REQUIREMENTS
Due each year from the effective date of the permit

City of Mandeville
Chinchuba Swamp & East Tchefuncte Wetland Assimilation Project
3101 East Causeway Approach
Mandeville, Louisiana 70448

PERMIT NUMBER: LA0038288
AGENCY INTEREST NUMBER: AI 19420
ACTIVITY NUMBER: PER20080001

GROWTH STUDIES – STEM GROWTH (Flora)

PARAMETER	GROWTH STUDIES – STEM GROWTH (FLORA)					
	Discharge Area (g/m2/yr)			Reference Area (g/m2/yr)		
Treatment Area	UAA Overall Average	Current Overall Average	Difference [1]	UAA Overall Average	Current Overall Average	Difference [1]
Treatment Area 1						
Treatment Area 2						
Treatment Area 3						
Control Area 1						
Control Area 2						

[1] The difference in the UAA value and the Current value shall be indicated by **NO INCREASE = 0**, **INCREASE = 1**, or **DECREASE = 2**.

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the stem grow (flora) in the Reference Area and the Discharge Area?

☐ YES ☐ NO

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

GROWTH STUDIES – LITTER FALL (Flora)

PARAMETER	GROWTH STUDIES – LITTER FALL (Flora)					
	Discharge Area (g/m2/yr)			Reference Area (g/m2/yr)		
Treatment Area	UAA Total Dry Weight	Current Total Dry Weight	Difference	UAA Total Dry Weight	Current Total Dry Weight	Difference
Treatment Area 1				N/A	N/A	N/A
Treatment Area 2				N/A	N/A	N/A
Treatment Area 3				N/A	N/A	N/A
Control Area 1	N/A	N/A	N/A			
Control Area 2	N/A	N/A	N/A			

[1] The difference in the UAA value and the Current value shall be indicated by **NO INCREASE = 0**, **INCREASE = 1**, or **DECREASE = 2**.

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Litter Fall (Flora) in the Reference Area and the Discharge Area?

☐ **YES** ☐ **NO**

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

GROWTH STUDIES – Marsh Productivity

PARAMETER	GROWTH STUDIES - LITTER FALL (Flora)					
	Discharge Area (g/m2/yr)			Reference Area (g/m2/yr)		
Treatment Area	UAA Total Dry Weight	Current Total Dry Weight	Difference	UAA Total Dry Weight	Current Total Dry Weight	Difference
Treatment Area 1				N/A	N/A	N/A
Treatment Area 2				N/A	N/A	N/A
Treatment Area 3				N/A	N/A	N/A
Control Area 1	N/A	N/A	N/A			
Control Area 2	N/A	N/A	N/A			

[1] The difference in the UAA value and the Current value shall be indicated by **NO INCREASE = 0, INCREASE = 1**, or **DECREASE = 2**.

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Litter Fall (Flora) in the Reference Area and the Discharge Area?

☐ **YES** ☐ **NO**

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

WATER STAGES (Surface Water)

Date	WATER STAGES (Surface Water)				
	(cm)			(cm)	
	Discharge Area 1	Discharge Area 2	Discharge Area 3	Reference Area 1	Reference Area 2

ATTACH GRAPHS FOR EACH OF THE AREAS.

SUMMARY OF THE OVERALL WATER STAGE FOR ONE YEAR.

NUTRIENT ANALYSIS I (Surface Water)

PARAMETER	NUTRIENT ANALYSIS I (Surface Water)											
	Discharge Area							Reference Area				
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Total Kjeldahl Nitrogen (TKN)													
Total Phosphorus (TP)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0**, **INCREASE=1**, and **DECREASE=2**.

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

NUTRIENT ANALYSIS I (Surface Water) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Nutrient Analysis I (Surface Water) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

NUTRIENT ANALYSIS II (Surface Water)

PARAMETER	NUTRIENT ANALYSIS II (Surface Water)												
	Discharge Area							Reference Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference[2] (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Ammonia (NH3-N)													
Nitrite Nitrogen (NO2-N)													
Nitrate Nitrogen (NO3-N)													
Phosphate (PO_4-P)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0, INCREASE=1, DECREASE=2.**

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

NUTRIENT ANALYSIS II (Surface Water) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Nutrient Analysis II (Surface Water) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

NUTRIA ASSESSMENT DISCUSSION:

DISCHARGE PATTERN DISCUSSION:

FOURTH YEAR WETLAND MONITORING & REPORTING REQUIREMENTS
Summary Sheet
Due four (4) years from the effective date of the permit

City of Mandeville
Chinchuba Swamp & East Tchefuncte Marsh Wetland Assimilation Project
3101 East Causeway Approach
Mandeville, Louisiana 70448

PERMIT NUMBER: LA0038288
AGENCY INTEREST NUMBER: AI 19420
ACTIVITY NUMBER: PER20080001

SPECIES CLASSIFICATION (Flora)

PARAMETERS		SPECIES CLASSIFICATION										
		UAA or Previous Classification ____ (year)					CURRENT					Difference
Area	Species	No.	Relative Density	Relative Dominance	Relative Frequency	Importance Value	No.	Relative Density	Relative Dominance	Relative Frequency	Importance Value	
Discharge Area 1												
Discharge Area 2												
Discharge Area 3												
Reference Area 1												
Reference Area 2												

[1] The difference in the UAA value and the Current value shall be indicated by **NO INCREASE = 0, INCREASE = 1, or DECREASE = 2.**

SPECIES CLASSIFICATION ~ Flora (continued)

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Species Classification (Flora) in the Reference Area and the Discharge Area?

☐ YES ☐ NO

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

PERCENTAGE of WHOLE COVER ~ Flora

ABOVEGROUND BIOMASS PRODUCTION (Flora)							
AREA	UAA or Previous Aboveground NPP* (year)			Current			DIFFERENCE[1]
	Ephemeral Productivity[2]	Perennial Productivity[3]	Aboveground NPP[4]	Ephemeral Productivity[2]	Perennial Productivity[3]	Aboveground NPP[4]	
Discharge Area 1							
Discharge Area 2							
Discharge Area 3							
Reference Area 1							
Reference Area 2							

[1] The difference in the UAA value and the Current value shall be indicated by **NO INCREASE = 0, INCREASE = 1, or DECREASE = 2.**
[2] Ephemeral Productivity = litter fall productivity (leaf and fruit fall).
[3] Perennial Productivity = aboveground wood production.
[4] Aboveground Net Primary Production = the sum of leaf litter and wood protection.

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Aboveground Biomass Production (Flora) in the Reference Area and the Discharge Area.

☐ YES ☐ NO

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

METAL ANALYSIS (Flora)

PARAMETER	METAL ANALYSIS (Flora)												
	Discharge Area							Reference Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference[2] (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Magnesium (Mg)													
Lead (Pb)													
Cadmium (Cd)													
Chromium (Cr)													
Copper (Cu)													
Zinc (Zn)													
Iron (Fe)													
Nickel (Ni)													
Silver (Ag)													
Selenium (Se)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0, INCREASE=1, DECREASE=2.**

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

METAL ANALYSIS (Flora) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Metal Analysis (Flora) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

METAL ANALYSIS (Sediment)

PARAMETER	METAL ANALYSIS (Sediment)												
	Discharge Area							Reference Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference[2] (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Magnesium (Mg)													
Lead (Pb)													
Cadmium (Cd)													
Chromium (Cr)													
Copper (Cu)													
Zinc (Zn)													
Iron (Fe)													
Nickel (Ni)													
Silver (Ag)													
Selenium (Se)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0, INCREASE=1, DECREASE=2.**

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

METAL ANALYSIS (Sediment) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Metal Analysis (Sediment) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

METAL ANALYSIS (Surface Water)

PARAMETER	METAL ANALYSIS (Surface Water)												
	Discharge Area							Reference Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference[2] (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Magnesium (Mg)													
Lead (Pb)													
Cadmium (Cd)													
Chromium (Cr)													
Copper (Cu)													
Zinc (Zn)													
Iron (Fe)													
Nickel (Ni)													
Silver (Ag)													
Selenium (Se)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0**, **INCREASE=1**, **DECREASE=2**.

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

METAL ANALYSIS (Surface Water) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Metal Analysis (Sediment) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

NUTRIENT ANALYSIS I (Flora)

PARAMETER	NUTRIENT ANALYSIS I (Flora)												
	Discharge Area							Control Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference[2] (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Total Kjeldahl Nitrogen (TKN)													
Total Phosphorus (TP)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0**, **INCREASE=1**, and **DECREASE=2**.

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

NUTRIENT ANALYSIS I (Flora) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Nutrient Analysis I (Flora) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

NUTRIENT ANALYSIS I (Sediment)

PARAMETER	NUTRIENT ANALYSIS I (Sediment)												
	Discharge Area							Reference Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Total Kjeldahl Nitrogen (TKN)													
Total Phosphorus (TP)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0**, **INCREASE=1**, and **DECREASE=2**.

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

NUTRIENT ANALYSIS I (Sediment) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Nutrient Analysis I (Sediment) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

NUTRIENT ANALYSIS II (Sediment)

PARAMETER	NUTRIENT ANALYSIS II (Sediment)												
	Discharge Area							Reference Area					
	UAA Average (mg/L) Discharge Area			Current Average (mg/L) Discharge Area			Difference[1]	UAA Average (mg/L) Reference Area		Current Average (mg/L) Reference Area		Difference[1]	ANOVA Significant Difference[2] (p=0.05) YES or NO
	1	2	3	1	2	3		1	2	1	2		
Ammonia (NH3-N)													
Nitrite Nitrogen (NO2-N)													
Nitrate Nitrogen (NO3-N)													
Phosphate (PO_4-P)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0, INCREASE=1, DECREASE=2.**

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

NUTRIENT ANALYSIS II (Sediment) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Nutrient Analysis II (Sediment) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

OTHER PARAMETERS (Surface Water)

PARAMETER	OTHER PARAMETERS (Surface Water)												
	Discharge Area							Reference Area					
	UAA Average (mg/L)			Current Average (mg/L)			Difference[1]	UAA Average (mg/L)		Current Average (mg/L)		Difference[1]	ANOVA Significant Difference[2] (p=0.05)
	Discharge Area			Discharge Area				Reference Area		Reference Area			YES or NO
	1	2	3	1	2	3		1	2	1	2		
Biochemical Oxygen Demand (BOD_5)													
Total Suspended Solids (TSS)													
pH													
Dissolved Oxygen (DO)													

[1] The difference in the UAA value and the current value shall be indicated by **NO INCREASE=0**, **INCREASE=1**, **DECREASE=2**.

[2] Analysis of Variance (ANOVA), a significant difference (p=0.05) between the Discharge Area and the Reference Area shall be indicated by YES or NO.

OTHER PARAMETERS (Surface Water) continued:

ANALYSIS OF VARIANCE (ANOVA):

Has there been a significant difference (p=0.05) between the Other Parameters (Surface Water) in the Reference Area and the Discharge Area?

As indicated in the table as YES or NO.

If yes, please explain the significant differences between the Reference Area and the Discharge Area and outline any corrective actions taken, if needed.

ACCRETION RATE DISCUSSION: