FACT SHEET

as required by LAC 33:IX.3109 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038431; AI 19979; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Town of Amite City
Amite City Sewer Treatment Facility
212 East Oak Street
Amite, LA 70422

II. **PREPARED BY:** Angela Marse

DATE PREPARED: November 23, 2009

III. **PERMIT ACTION:** reissue LPDES permit LA0038431, AI19979

LPDES application received: May 1, 2009

LPDES permit issued: August 1, 2004
LPDES permit expired: July 31, 2009

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Amite City.

B. The permit application does not indicate the receipt of any industrial wastewater for which pretreatment standards have been developed. Discharges from industrial sources include only sanitary wastewater and washwater.

C. The facility is located at the end of Cherry Street in Amite City, Tangipahoa Parish.

D. The facility was upgraded in 2004. The treatment facility consists of screen removal, an aerated lagoon separated into four sections by baffle curtains followed by sand filters. Disinfection is by chlorination. The facility also has post aeration.

E. Outfall 001

Discharge Location: Latitude 30°43'12" North
Longitude 90°29'53" West

Description: treated sanitary wastewater

Design Capacity: 1.3 MGD

Type of Flow Measurement which the facility is currently using:
Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into the Tangipahoa River in segment 040701 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the Tangipahoa River is 218 cfs.

The **hardness value** is 25 mg/l and the **fifteenth percentile value for TSS** is 4.7 mg/l.

The designated uses and degree of support for Segment 040701of the Lake Ponchartrain Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Full	Not Supported	Full	N/A	N/A	N/A

[1/] The designated uses and degree of support for Segment 040701 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040701 of the Lake Pontchartrain Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury and pathogen indicators. To date no TMDLs have been completed for this waterbody.

Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Pathogen Indicators

Monitoring for fecal coliform is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against potential receiving water impairments due to pathogens, fecal coliform limits have been established in the permit. Permit limits are reflective of water quality standards for primary contact recreation, a designated use of the receiving stream.

Mercury
The named waterbody in segment 040701 (Tangipahoa River) is impaired for mercury. The source of mercury has been identified as atmospheric deposition. The discharge is into an unnamed ditch, thence into the Tangipahoa River. A review of the application indicates a few commercial users (dentists, medical clinics, etc.) that could potentially contribute to the receiving waterbody's mercury impairment. For these reasons, the Town of Amite City will be required to develop a Mercury Minimization Program Plan (MMPP). It is the position of this Department that development and implementation of a Mercury Minimization Program Plan (MMPP) continues to be the most efficient reduction of mercury discharges to surface waters of Louisiana from the Town of Amite City's wastewater treatment facility. Pollution prevention and waste minimization are more reasonably accomplished and cost productive than the implementation of controls and technologies to meet such stringent end-of-pipe mercury limitations. The MMPP employs EPA approved analytical methods (*EPA Methods 1631, 245.7*) through effluent sampling and system wide monitoring programs to locate and identify potential sources of mercury in the treatment system. Once identified the MMPP integrates cost-effective reduction controls, either treatment or prevention based, to reduce or eliminate mercury from the source. Should the TMDL for mercury determine a mercury effluent limitation is necessary; a reopener clause has been included in the draft permit. Data collected from monitoring required by the MMPP may help the Town evaluate compliance with any final mercury TMDL.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040701 of the Lake Ponchartrain Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish & Wildlife Service (FWS) as habitat for the *Gulf sturgeon* which is listed as a threatened/endangered species. This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). A copy of the draft permit has been submitted to the FWS for review.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Interim Effluent Limits:

OUTFALL 001

No TMDL or other water quality studies have been completed since the issuance of the previous permit and the facility treatment method remains the same. Therefore, effluent limitations will be the same as the previous permit with the exception of the monitoring requirements for ammonia, total kjeldahl nitrogen, and total phosphorus. Subsegment 040701 was impaired for ammonia, phosphorus, and nitrogen according to the 1998 Court Ordered 303(d) list. Subsequent List (2000, 2002, 2004) did not attribute these impairments to the waterbody not meeting its designated uses. To determine if a water quality limit for ammonia was needed in the permit, DMR data from the previous two years was evaluated to find the geometric mean. The geometric of the monthly average was 1.4 mg/l and the geometric mean of the daily max was 2.01 mg/l. Evaluating the geometric mean in the water quality spreadsheet (Appendix A-1) did not indicate the need for an ammonia limit in the permit. The Water Quality Inventory Section 305(b) Report (2006) indicates the subsegment is impaired for mercury and pathogen indicators. (See Section V. Receiving Waters for discussion of these impairments.) Since the receiving water is no longer impaired for ammonia, nitrogen, or phosphorus, the monitoring requirements for these parameters have been removed from the permit.

Results of a priority pollutant scan were submitted with the application. A water quality screen indicated a water quality based limited was needed for copper to meet water quality standards. (See Appendix A-1.) During the draft comment period, the City may submit the results of three (3) or more additional effluent analyses taken no less than 48 hours apart to either refute or substantiate the presence of these pollutants. Prior to finalizing the permit, the additional analyses will be evaluated by this Office to determine if the pollutant is potentially in the effluent and if it exceeds the State's water quality standards. If a water quality based limit is needed in the final permit, an interim period is proposed to allow the permittee time to comply with the limit.

Interim limits shall become effective on the effective date of the permit and expire two years from the effective date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	108	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	162	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
Copper	Report lb/day	Report lb/day	Interim requirement to allow for compliance with final water quality based limit.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

If chlorination is used to achieve the limitations on Fecal Coliform Bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored daily by grab sample.

Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, April 16, 2008, VERSION 6). Whole effluent toxicity testing is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics.

Based on information contained in the permit application and a reivew of biomonitoring test results required by the previous permit, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. Testing since the issuance of the previous permit shows the permittee complied with the biomonitoring requirements contained in LA0038431 with no toxicity failures on file during the past five years.

It is recommended that freshwater acute biomonitoring continue to be an effluent characteristic of Outfall 001 at the frequency indicated below. If no significant lethal effects are demonstrated at or below the critical dilution during the first four quarters of testing, the permitte may certify fulfillment of the WET testing requirements to the permitting authority and WET testing may be reduced to not lesss than once per six months for the more sensitive species (*Ceriodaphnia dubia*) and not less than once per year for the less sensitive species (*Pimphales promelas*) for the remainder of the term of the permit. Upon expiration of the permit, the monitoring frequency for both test species shall revert to once per quarter until the permit is re-issued.

The toxicity test procedures stipulated as a condition of this permit are listed below.

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No LA0038431 **Section E** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Acute static renewal 48-hour definitive toxicity test Using water fleas (Daphnia pulex) EPA-821-R-02-012	1/quarter
Acute static renewal 48-hour definitive toxicity test Using fathead minnows (Pimephales promelas) EPA-821-R-02-012	1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 8%, 11%, 15%, 20%, and 26%. The whole effluent toxicity limit (critical low-flow dilution) is defined as 20% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in **Section E** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in **Section E** of the permit.

Final Effluent Limits:

Final limits shall become effective two years from the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	108	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
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Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
Copper	0.035 mg/l	0.082 mg/l	Water Quality Based Effluent Limit. See Appendix A-1.

Other Effluent Limitations:

1) **Fecal Coliform**

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0038431: Issued: August 1, 2004
Expired: July 31, 2009

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
$CBOD_5$	10 mg/l	15 mg/l	2/week	Grab
TSS	15 mg/l	23 mg/l	2/week	Grab
Ammonia-Nitrogen	Report mg/l	Report mg/l	2/week	Grab
TRC	No measurable		2/week	Grab
Phosphorus	Report mg/l	Report mg/l	2/week	Grab
Kjeldahl Nitrogen	Report mg/l	Report mg/l	2/week	Grab
Fecal Coliform Colonies	200	400	2/week	Grab
pH	---	---	2/week	Grab

The permit contains pretreatment language.
The permit contains biomonitoring.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning January 1, 2007 and ending June 30, 2009 for this facility.

Date – May 6, 2009
Inspector - LDEQ
Findings and/or Violations -

1. The permit was maintained on site, expires July 31, 2009 and an application has been submitted to LDEQ.
2. A DMR review revealed violations for fecal coliform in 2008.
3. All equipment was operational, effluent was clear, no foam observed in receiving stream.
4. Flow meter needed annual calibration.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

EPA Issuance:

Docket # - CWA-06-2008-1734
Date Issued – January 7, 2008
Findings of Fact:

1. The permittee, Town of Amite, owns and operates a sewer treatment plant, subject to the Clean Water Act and federal regulations governing the use and disposal of sewage sludge.
2. POTWs with a design capacity of one million gallons per day shall submit to EPA an annual sludge monitoring report.
3. The Permittee did not submit an annual sludge monitoring report for the calendar year 2006.

Order:

1. The Permittee was ordered to submit a completed annual sludge monitoring report for sludge operations during calendar year 2006.

C) **DMR Review**

A review of the discharge monitoring reports for the period beginning **March, 2007** through **March, 2009** has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Fecal coliform	001	March, 2009	400	2000
Fecal coliform	001	August, 2008	400	2000
Fecal coliform	001	July, 2008	400	2000
Fecal coliform	001	June, 2008	400	2000
Fecal coliform	001	April, 2008	400	1130
CBOD	001	June, 2007	10 mg/l	67.9 mg/l
CBOD	001	June, 2007	15 mg/l	119 mg/l
CBOD	001	May, 2007	10 mg/l	39 mg/l
CBOD	001	May, 2007	15 mg/l	101 mg/l
CBOD	001	April, 2007	10 mg/l	27 mg/l
CBOD	001	April, 2007	15 mg/l	87.5 mg/l

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also 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.

In accordance with LAC 33:IX.2903., 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.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 1.3 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 gal/lb x 1.3 MGD x 10 mg/l = 108 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **1.0** and **5.0 MGD.**

Pretreatment Requirements

Based upon the application and consultation with LDEQ pretreatment personnel, standard pretreatment language is included in the permit.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2008.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Amite City, Amite City Sewer Treatment Facility, May 1, 2008.