

LOUISIANA

MUNICIPAL WATER POLLUTION PREVENTION

MWPP



Facility Name:

City of Hammond/South Slough
Wetland Wastewater
Assimilation Project

LPDES Permit Number:

LA0032328

Agency Interest (AI) Number:

19578

Address:

1801 Natchez St.

Hammond, LA 70404

Parish:

Tangipahoa

(Person Completing Form) Name:

H. Nathan Levy III

Title:

Wastewater Consultant

Date Completed:

8/22/2020

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 specific 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.

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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)
8	6.1	x	103.8	x 8.34 =	5280.72
9	3	x	144	x 8.34 =	3602.88
10	5.6	x	145.7	x 8.34 =	6804.77
11	4.6	x	165.8	x 8.34 =	6360.75
12	5.3	x	135.1	x 8.34 =	5971.69
1	9.1	x	113.3	x 8.34 =	8598.79
2	8.6	x	88.8	x 8.34 =	6369.09
3	4.4	x	121.2	x 8.34 =	4447.56
4	3.3	x	107.9	x 8.34 =	2969.62
5	6.8	x	132.4	x 8.34 =	7508.67
6	7.4	x	105.2	x 8.34 =	6492.52
7	9.1	x	135	x 8.34 =	10245.69

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.

<i>Design Flow, MGD:</i>	6	x 0.90 =	5.4
<i>Design BOD, lb/day:</i>	9608	x 0.90 =	8647.2

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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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	0	0	0	0	0	5	5	5	5	5	5	5	5

Write 0 or 5 in the C point total box 5 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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	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 15 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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	0	0	5	5	5	10	10	10	10	10	10	10	10

Write 0, 5, or 10 in the E point total box 0 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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	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 10 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: 30 (max = 80)

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

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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)
August 2019	19.1	20.5
September 2019	24.3	29
October 2019	25.9	25.7
November 2019	31.6	35.5
December 2019	33.8	51.6
January 2020	23.8	26.9
February 2020	26.3	25.3
March 2020	31.5	25.3
April 2020	14.92	17.5
May 2020	14.61	19.6
June 2020	15.6	25.7
July 2020	15.4	20.5

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

	Permit Limit		90% of Permit Limit
<i>BOD, mg/l</i>	30	x 0.90 =	27.0
<i>TSS, mg/l</i>	90	x 0.90 =	81.0

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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	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 20 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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	0	5	5	10	10	10	10	10	10	10	10	10	10

Write 0, 5, or 10 in the ii point total box 10 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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	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 0 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.

<i>months</i>	0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	0	5	5	10	10	10	10	10	10	10	10	10	10

Write 0, 5, or 10 in the iv point total box 0 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: 30 (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 an 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:*

Whole Effluent Toxicity-Biannual July - December 2019
Pimephales promelas failed. No action is required. First Biannual January - June 2020 passed all survival criteria.

- 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:*

PART 3: AGE OF THE WASTEWATER TREATMENT FACILITY

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

$$\begin{array}{rcccl}
 & & & \underline{2006} & \\
 & & & \hline
 \text{Current Year} & - & \text{Answer to A} & = & \text{Age in years} \\
 \hline
 2020 & & 2006 & & 13 \\
 \hline
 \end{array}$$

Enter Age in Part C below.

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

FACTOR:

<input type="checkbox"/>	Mechanical Treatment Plant (trickling filter, activated sludge, etc...) Specify Type: _____	2.5
<input checked="" type="checkbox"/>	Aerated Lagoon	2.0
<input type="checkbox"/>	Stabilization Pond	1.5
<input type="checkbox"/>	Other Specify Type: _____	1.0

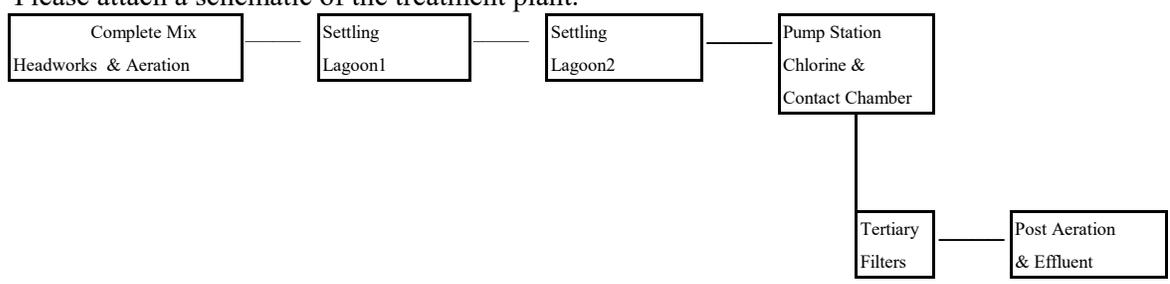
C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determine the total point value for Part 3.

TOTAL POINT VALUE FOR PART 3 =

$$\frac{2}{\text{Factor}} \times \frac{13}{\text{Age}} = \boxed{26} \text{ (max = 50)}$$

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:

0 ✓ Check one box. 0 = 0 points 3 = 15 points
 1 = 5 points 4 = 30 points
 2 = 10 points 5 or more = 50 points

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

Collection System: 0 Treatment Plant: 0

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:

0 ✓ Check one box. 0 = 0 points 3 = 15 points
 1 = 5 points 4 = 30 points
 2 = 10 points 5 or more = 50 points

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

Collection System: 0 Treatment Plant: 0

- 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: 0 (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:

Nathan Levy Wastewater Consultant
Describe the procedure for gathering, compiling and reporting:
Information is recorded daily on excel spreadsheet. Information is then combined to complete montly reports. These reports are used to generate net DMR for approval of Administration then posting to net DMR for review by LDEQ.

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.

<i>months</i>	<input type="radio"/> <2	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4-5	<input checked="" type="radio"/> >6
<i>points</i>	50	30	20	10	0

Write 0, 10, 20, 30 or 40 in the A point total box 0 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.

<i>months</i>	<input type="radio"/> <2	<input type="radio"/> 6-11	<input type="radio"/> 12-23	<input type="radio"/> 24-35	<input checked="" type="radio"/> >36
<i>points</i>	50	30	20	10	0

Write 0, 10, 20, 30 or 40 in the B point total box 0 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: 0 (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: 29,200

Design Flow: 7.33 MGD

Design BOD: 300.00 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:

None

- 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:

None

- 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.

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PART 7: OPERATOR CERTIFICATION AND EDUCATION

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

Name: Vernon Banks

B. What is his or her certification number:

Cert.#: 16-335

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

Level Required: Class 4

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

Level Certified: Class 4

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: All operators must become certified to level required within reasonable time frame. City pays for all operator training and educational hours

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

By the permittee? 100 % By the operator? 0 %

J. Add together the E and G point vaules 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.

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?

In addition to sewer connection, impact and treatment fees, the city has an Enterprise Fund established for water and sewer revenues and expenses. A user fee collected montly along with water/sewer monthly collections are revenue sources. The Sales Tax Fund is available for construction projects, but discouraged to ensure that the water and sewer revenues adequately fund water and sewer projects and routine operations and maintenance.

PART 9: SUBJECTIVE EVALUATION

A. Collection System Maintenance

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

Routine Sewer System Evaluation Survey (SSES) and cleaning/TV lines to find intrusions. Lining of existing pipes in several subdivisions, downtown, and SLU area. Ongoing \$675k rehabilitation of collection system (I/I work) in older area of city.

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

Continuous repairs and maintenance of infrastructure is done as needed by adding new stations #55 at University Grand Apartment and #56 at W. Charles & Railroad Ave.

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

Inflow and infiltration on the collection system is ongoing in addition to \$2.1 million upgrade to the treatment facility to increase capacity, aeration and detention time, funded through the Clean Water Revolving Loan Fund. Attached are planned improvements submitted to LDEQ.

B. If you have ponds please answer the following questions:

√ Check one box.

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

C. Treatment Plants

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

Yes No (✓ Check one box.)

NA

Influent flow meter calibration date(s)

July 19, 2020

Effluent flow meter calibration date(s)

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

Insufficient Aeration, short-circuiting of influent to effluent discharged due to high flow. High Ammonia with little reduction in concentration of effluent.

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

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

The community elected in November 2019 to approve the drawdown of a \$2.1 million CWSRL fund to upgrade the treatment facility. The plans include adding aerators and a new pond that will increase capacity to 8 MGD. It will also improve detention time and overall aeration. Plans will be submitted for bid on October 1, 2020.

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:*

Standard Operational Procedures

- 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:*

Ordinance is posted for public viewing available on the City of Hammond Website. Copy is attached.

- ii. Has it been necessary to enforce?

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

Dean Foods, Dairy Processing Plant

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

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POINT CALCULATION TABLE

	Actual Values	Maximum
Part 1: <i>Influent Flow/Loadings</i>	<u>30</u>	80 points
Part 2: <i>Effluent Quality / Plant Performance</i>	<u>30</u>	100 points
Part 3: <i>Age of WWTF</i>	<u>26</u>	50 points
Part 4: <i>Overflows and Bypasses</i>	<u>0</u>	100 points
Part 5: <i>Ultimate Disposition of Sludge</i>	<u>0</u>	100 points
Part 6: <i>New Development</i>	<u>0</u>	30 points
Part 7: <i>Operator Certification Training</i>	<u>0</u>	100 points

TOTAL POINTS: 86

ATTACHMENT 3

SAMPLE MWPP RESOLUTION

Resolved that the village/town/city of Hammond, LA 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 LA0032328.

(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