LOUISIANA

MUNICIPAL WATER POLLUTION PREVENTION

MWPP

DEQ LOUISIANA

Facility Name:	St. Charles Parish Council Destrehan Wastewater Treatment Plant
LPDES Permit Number:	LA 0073539
Agency Interest (AI) Number:	AI 39862
Address:	Post Office Box 302
	Hahnville, Louisiana 70057
Parish:	St. Charles
(Person Completing Form) Name:	Angela Troxler
Title:	Laboratory Coordinator
Date Completed:	January 10, 2018

Permit #: LA0073539

PART I. 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)
1.971	x	197	x 8.34 =	3,283
2.795	x	151	x 8.34 =	3,520
4.318	x	175	x 8.34 =	6,302
2.872	x	159	x 8.34 =	3,808
2.778	x	157	x 8.34 =	3,637
2.905	x	177	x 8.34 =	4,288
4.050	x	137	x 8.34 =	4,627
5.062	x	122	x 8.34 =	5,150
4.037	x	130	x 8.34 =	4,377
5.437	x	165	x 8.34 =	7,482
2.855	x	155	x 8.34 =	3,691
3.073	x	174	x 8.34 =	4,459

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:	6.0	x 0.90 =	5.4
Design BOD, lb/day:	7,506	x 0.90 =	6,755

Permit #: LA0073539

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 correspoding 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 [0] 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 [0] 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 [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.

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 [0] 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: [0] (max = 80)

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

Permit #: LA0073539

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)
November 2016	2	2
December 2016	2	3
January 2017	3	1
February 2017	5	2
March 2017	4	2
April 2017	3	2
May 2017	3	2
June 2017	3	3
July 2017	2	3
August 2017	2	2
September 2017	2	1
October 2017	2	1

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

	Permit Limit		90% of Permit Limit
BOD, mg/l	30.0	x 0.90 =	27.0
TSS, mg/l	30.0	x 0.90 =	27.0

Permit #: LA 0073539

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 correspoding 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 [0] 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 [0] 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 correspoding 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 [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.

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 [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: [0] (max = 100)

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

Permit #: LA0073539

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 #: LA0073539

PART 3: AGE OF THE WASTEWATER TREATMENT FACILITY

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

2000

Current Year	-	*Answer to A*	=	*Age in years*
2017		2000		17

Enter Age in Part C below.

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

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

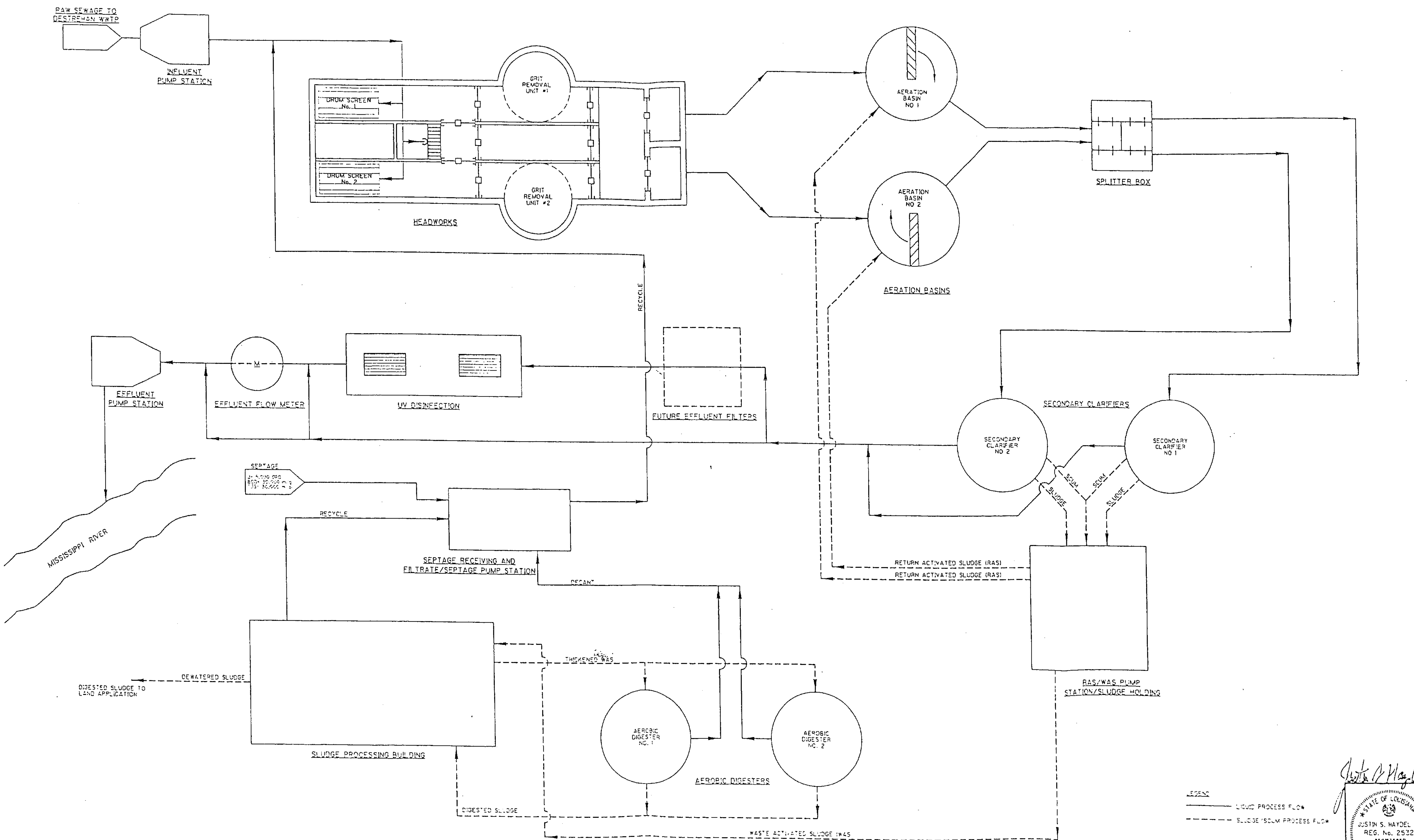
C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determint the total point value for Part 3.

TOTAL POINT VALUE FOR PART 3 =

2.5	x	17	=	42.5 (max = 50)
Factor		*Age*		

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.



STATE OF LOUISIANA
JUSTIN S. HAYDEL JR.
REG. No. 25321
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING
7/30/97

REV. NO.	DATE	DRAN	CHK'D	REMARKS

R. CHAPIN
D. BESENYE
R. DRIVER
J. HAYDEL
JULY 1997

CDM CAMP DRESSER & McKEE INC.
in association with:
MONTGOMERY WATSON
SJB GROUP

ST CHARLES PARISH DEPARTMENT OF PUBLIC WORKS / WASTEWATER
ST CHARLES PARISH, LOUISIANA

DESTREHAN REGIONAL WASTEWATER TREATMENT PLANT

PROCESS FLOW DIAGRAM

PROJECT NO.
FILE NAME:
SHEET NO
P-1

Permit #: LA0073539

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:

13 √ 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 withing the collection system and the number at the treatement plant

Collection System: 13 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:

10 √ 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 withing the collection system and the number at the treatement plant

Collection System: 10 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…

City Sewer System

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

TOTAL POINT VALUE FOR PART 4: 100 (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:

L. J. Brady, Assistant Director of Wastewater

Describe the procedure for gathering, compiling and reporting:

Overflows, bypasses and unpermitted discharges are submitted by the operator and reported to the appropriate agencies (SPOC, DEQ).

Permit #: LA0073539

PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storgage

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 [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.

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 [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.

Permit #: LA0073539

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: 44,000

Design Flow: 6.0 MGD

Design BOD: 30-45 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: 0 (max = 30)

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

Permit #: LA0073539

PART 7: OPERATOR CERTIFICATION AND EDUCATION

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

Name: Herman Cortez

B. What is his or her certification number:

Cert.#: 17-208

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

Level Required: IV

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

Level Certified: IV

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. [X] Yes = 0 points [ ] No = 50 points

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

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

√ Check one box. [X] Yes [ ] No

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

√ Check one box. [X] > 12 hours = 0 points [ ] < 12 hours = 50 points

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

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

√ Check one box. [X] Yes [ ] No

Explain: Training is outlined in the Department BMP, Plant Emergency Procedures, Plant O&M Manual, and the Safety Manual.

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: [0] (max = 100)

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

Permit #: LA0073539

PART 8: FINANCIAL STATUS

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

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

At present time the User-Charge Revenues are sufficient to cover operation and maintenance expenses.

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

DEQ loans, grants, general fund and new ad valorem tax.

Permit #: LA0073539

PART 9: SUBJECTIVE EVALUATION

A. Collection System Maintenance

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

Clean and camera lines. Rehabilitate manholes. Repair broken lines. Locate and number manholes. GIS. Replaced force mains.

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

Pulled all pumps, inspected wet wells, control panels and all valves concerning lift stations. New pumps and controls.

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

New lift stations, upgrade lift stations, new force mains, and rehab gravity lines.

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 excersise 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 #: LA0073539

C. Treatment Plants

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

☒ Yes ☐ No (√ Check one box.)

10/24/17
Influent flow meter calibration date(s)

10/24/17
Effluent flow meter calibration date(s)

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

None

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

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

Permit #: LA0073539

D. Preventive Maintenance

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

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

The Department's BMP as well as the manufactures manuals detailing PM and the Plant O&M Manual.

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

[X] 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?

[X] 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. [X] Yes [ ] No *If Yes, Please describe:*

Ordinance 85-8-8 imposes BOD, TSS, pH, Oil and Grease, COD, and Metals limits on discharges. All limits correspond to average domestic strength domestic waste.

ii. Has it been necessary to enforce?

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

We require all comercial and industrial users to abide by these limits.

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

Permit #: LA0073539

POINT CALCULATION TABLE

	Actual Values	Maximum
Part 1: *Influent Flow/Loadings*	0	80 points
Part 2: *Effluent Quality / Plant Performance*	0	100 points
Part 3: *Age of WWTF*	42.5	50 points
Part 4: *Overflows and Bypasses*	100	100 points
Part 5: *Ultimate Disposition of Sludge*	0	100 points
Part 6: *New Development*	0	30 points
Part 7: *Operator Certification Training*	0	100 points

TOTAL POINTS: 142.5