

LOUISIANA

MUNICIPAL WATER POLLUTION PREVENTION

MWPP



<i>Facility Name:</i>	St. Charles Parish Council Destrehan Wastewater Treatment Plant
<i>LPDES Permit Number:</i>	LA 0073539
<i>Agency Interest (AI) Number:</i>	AI 39862
<i>Address:</i>	Post Office Box 302
	Hahnville, Louisiana 70057
<i>Parish:</i>	St. Charles
<i>(Person Completing Form) Name:</i>	Angela Troxler
<i>Title:</i>	Laboratory Coordinator
<i>Date Completed:</i>	November 19, 2015

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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)
2.234	x	62	x 8.34 =	1,155
2.073	x	89	x 8.34 =	1,538
2.586	x	176	x 8.34 =	3,795
3.581	x	243	x 8.34 =	7,257
3.051	x	161	x 8.34 =	4,096
3.951	x	136	x 8.34 =	4,481
4.479	x	145	x 8.34 =	5,416
4.22	x	143	x 8.34 =	5,032
3.618	x	134	x 8.34 =	4,043
2.9	x	172	x 8.34 =	4,159
2.409	x	200	x 8.34 =	4,018
2.691	x	177	x 8.34 =	3,972

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

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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>	<input type="radio"/> 0	1	2	3	4	5	6	7	8	9	10	11	12
<i>points</i>	<input type="radio"/> 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.

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

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

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

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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)
October 2014	4	3
November 2014	2	2
December 2014	3	2
January 2015	2	2
February 2015	2	4
March 2015	2	2
April 2015	3	2
May 2015	2	1
June 2015	3	2
July 2015	2	2
August 2015	2	3
September 2015	2	2

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

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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 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:

- 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:

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PART 3 - AGE OF THE WASTEWATER TREATMENT FACILITY

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

2000

$$\begin{array}{rcccl}
 \text{Current Year} & - & \text{Answer to A} & = & \text{Age in years} \\
 \hline
 2015 & & 2000 & & 15 \\
 \hline
 \end{array}$$

Enter Age in Part C below.

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

		FACTOR:
<u>X</u>	Mechanical Treatment Plant (trickling filter, activated sludge, etc...) Specify Type: <u>Activated Sludge</u>	2.5
<u> </u>	Aerated Lagoon	2.0
<u> </u>	Stabilization Pond	1.5
<u> </u>	Other Specify Type: _____	1.0

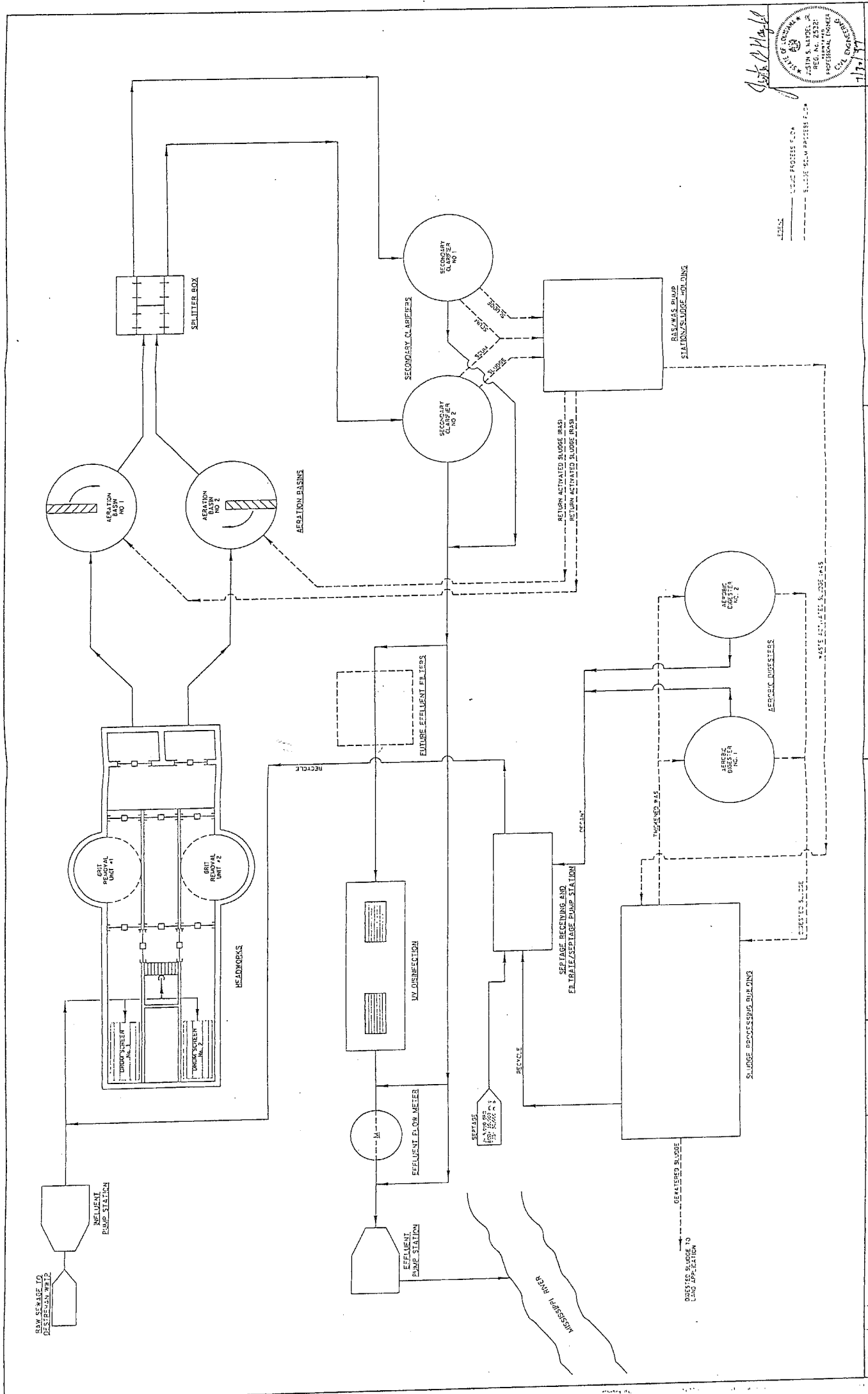
C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determinet the total point value for Part 3.

TOTAL POINT VALUE FOR PART 3 =

$$\frac{2.5}{\text{Factor}} \times \frac{15}{\text{Age}} = \boxed{37.5} \text{ (max = 50)}$$

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.



11/17/11
 JUSTIN S. MADEL, P.E.
 REG. NO. 25321
 PROFESSIONAL ENGINEER
 CIVIL ENGINEERING
 STATE OF LOUISIANA
 SHEET NO. P-1

ST CHARLES PARISH DEPARTMENT OF PUBLIC WORKS / WASTEWATER
 ST CHARLES PARISH, LOUISIANA
 DESTREHAN REGIONAL WASTEWATER TREATMENT PLANT
 PROCESS FLOW DIAGRAM

CDM CAMP DRESSER & MCKEE, INC.
 in association with:
 SIB GROUP
 MONTGOMERY WATSON
 1984-1987

NO.	DATE	BY	REVISIONS

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

<i>months</i>	<2	6-11	12-23	24-35	<input checked="" type="radio"/> >36
<i>points</i>	50	30	20	10	<input checked="" type="radio"/> 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: 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: (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: 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. 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: 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: (max = 100)

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

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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?

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?

User fees and sewer collection fees.

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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.

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?

Upgrading lift stations and sewer lines. Point Repairs.

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

√ Check one box.

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

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C. Treatment Plants

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

Yes No (✓ Check one box.)

6/18/15

6/18/15

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?

None

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

✓ Check one box.

Yes

No

If Yes, Please describe:

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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:

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?

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 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.

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.)

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POINT CALCULATION TABLE

	Actual Values	Maximum
Part 1: <i>Influent Flow/Loadings</i>	0	80 points
Part 2: <i>Effluent Quality / Plant Performance</i>	0	100 points
Part 3: <i>Age of WWTF</i>	37.5	50 points
Part 4: <i>Overflows and Bypasses</i>	100	100 points
Part 5: <i>Ultimate Disposition of Sludge</i>	0	100 points
Part 6: <i>New Development</i>	0	30 points
Part 7: <i>Operator Certification Training</i>	0	100 points

TOTAL POINTS:

137.5