

THE FOLLOWING RESOLUTION WAS INTRODUCED BY COUNCIL MEMBER BUSH; AND SECONDED FOR INTRODUCTION BY COUNCIL MEMBER KRELLER

RESOLUTION NO. 23-11

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MANDEVILLE INFORMING THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY OF ACTIONS TAKEN BY THE CITY COUNCIL OF THE CITY OF MANDEVILLE REGARDING THE WASTE WATER TREATMENT PLANT

BE IT RESOLVED, that the City of Mandeville informs the Louisiana Department of Environmental Quality that the following actions were taken by the City Council of the City of Mandeville:

1. Reviewed 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 Water Discharge Permit System (LPDES) number LA0038288.
 - a. Continue to provide certified operators for collection and operation by providing 16 hours of training per operator over the next year. This training will be conducted through off-site classes and with the assistance of CES, Inc.
 - b. The City will continue to video and smoke test to identify I&I problem areas.
 - c. Investigate City non-domestic user Ordinance during 2023, consider conducting a non-domestic user survey to identify system users.
 - d. The City will continue to work with its environmental consultant to increase monitoring of Ponds and maintain both wetland discharges as per the LPDES Permit project.
 - e. Monitor wetland discharges and ensure proper wetland loadings for permit compliance.
 - f. Continue the dredging of the Pond to remove excess solids and continue maintenance to maintain rock-reed filtration efficiency.
 - g. Continue to supply and consider additional aeration to ensure proper influent treatment and proper biological reduction.
 - h. The City will ensure proper operation of the treatment system through on-going testing, monitoring influents and using the EQ Basin when necessary.
 - i. Continue to monitor and rehab all areas identified as “problem areas” of the collection system and investigate potential solutions to rainfall events causing collection system overflows.
 - j. Continue to upgrade collection system lift stations and investigate methods of minimizing power outages.
 - k. Comply with DEQ Lab certification requirements, QA/QC monitoring procedures and

new electronic data submission requirements.

The resolution being submitted for a vote, the vote thereon was as follows:

AYES: 0
NAYS: 0
ABSENT: 0
ABSTENTIONS: 0

And the resolution was declared adopted this __th day of April 2023.

Kristine Scherer
Council Clerk

Rick Danielson
Council Chairman

CURTIS ENVIRONMENTAL SERVICES, INC.

WATER/WASTEWATER TESTING – CONSULTING – OPERATION
 BIOASSAY – OP CERT # 18-427 – LAB CERTIFICATION # 01984

185 BELLE TERRE BLVD.
 SUITE D
 LAPLACE, LA. 70068

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 EM: mike.curtis@curtislab.com



03/01/2023

2022 MWPP ANNUAL AUDIT - PLANT SUMMARY BY YEARS.
 (Lower values are the best operation).

PLANT: CITY OF MANDEVILLE

	Actual Values							Max.
	2022	2021	2020	2019	2018	2017	2016	
Part 1: Influent Flow	0	0	0	5	0	0	0	80 Pts
Part 2: Effluent Quality	0	0	0	0	0	0	0	100 Pts
Part 3: Age of WWTT	2	24	22	20	18	16	14	50 Pts
Part 4: Overflows and Bypasses	100	100	100	55	50	60	60	100 Pts
Part 5: Disposition of Sludge	0	0	0	0	0	0	0	100 Pts
Part 6: New Development	15	15	15	15	15	15	15	30 Pts
Part 7: Operator Training	0	0	0	0	0	0	0	100 Pts
TOTALS	117	139	137	95	83	91	89	560

This MWPP summary is provided by CES, Inc. and shows a quick reference on Plant and Collection system performance over the past 7 years. This is only a summary of previous MWPP Audit information submitted to DEQ by the City Utility Department. A lower score is the most desirable value. **The overall score decreased from last year due the reduction of the plant age as a result of the biosolids removal project. Overall, the treatment plant operated within the effluent permitted discharge limits for 2021.**

Sincerely;

David Curtis, P.E. – Operations Manager

LOUISIANA

MUNICIPAL WATER

POLLUTION PREVENTION

MWPP



<i>Facility Name:</i>	City of Mandeville
<i>LWDPS Permit Number:</i>	
<i>NPDES Permit Number:</i>	LA0038288
<i>Address:</i>	3101 Causeway Approach Mandeville La, La. 70448-3592
<i>Parish:</i>	St. Tammany Parish
<i>(Person Completing Form) Name:</i>	David Curtis, P.E.
<i>Title:</i>	Operations Manager - CES, Inc.
<i>Date Completed:</i>	03/01/2023

Instructions to the Operator-in-Charge

- 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 their 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. The 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.**

Facility Name

City of Mandeville-Hickory St.

PART 1: INFLUENT FLOW/LOADINGS

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.

Col. 1 Average Monthly Flow (million gallons per day, MGD)		Col. 2 Average Monthly BOD ₅ Concentration (mg/l)		Col. 3 Average Monthly BOD ₅ Loading (pounds per day)
1.508	X	186.6	X 8.34 =	1568.8
1.033	X	198.1	X 8.34 =	1706.7
0.997	X	229.0	X 8.34 =	1904.1
1.644	X	189.5	X 8.34 =	2598.2
0.958	X	170.8	X 8.34 =	1364.6
0.868	X	166.7	X 8.34 =	1206.8
0.977	X	162.4	X 8.34 =	1323.3
1.934	X	159.9	X 8.34 =	2579.1
1.547	X	142.6	X 8.34 =	1839.8
0.745	X	142.4	X 8.34 =	884.8
1.710	X	120.0	X 8.34 =	1711.4
2.070	X	173.9	X 8.34 =	3002.2

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 Manual (O & M) or contact your consulting engineer.

Design Flow, MGD	4.00	X 0.90 =	3.60
Design BOD, lb/day	6676		6008

Facility Name

City of Mandeville-Hickory St.

C. How many months did the monthly flow (Col. 1) to the wastewater treatment plant (WWTP) exceed 90% of 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	months	
points	0	0	0	0	0	5	5	5	5	5	5	5	5	points	

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

D. How many months did the monthly flow (Col. 1) to the WWTP 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	months	
points	0	5	5	10	10	15	15	15	15	15	15	15	15	points	

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

E. How many months did the monthly BOD loading (Col. 3) to the WWTP 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	months	
points	0	0	5	5	5	10	10	10	10	10	10	10	10	points	

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

F. How many times did the monthly BOD loading (Col. 3) to the WWTP 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	months	
points	0	10	20	30	40	50	50	50	50	50	50	50	50	points	

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 on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

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 Avg. Monthly BOD (mg/l)	Column 2 Avg. Monthly TSS (mg/l)
January	12	9
February	19	10
March	18	13
April	14	11
May	11	13
June	11	8
July	9	5
August	13	8
September	8	9
October	4	5
November	8	7
December	12	9

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

	Permit Limit		90% of Permit Limit
BOD, mg/l	30	X 0.90 =	27
TSS, mg/l	90	X 0.90 =	81

Facility Name

City of Mandeville-Hickory St.

C. Continuous Discharge to Surface Water

i. How many months did the effluent BOD concentration (Col. 1) exceed 90% of 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	months
points	0	0	10	20	30	40	40	40	40	40	40	40	40	points

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

ii. How many months did the effluent BOD concentration (Col. 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	months
points	0	5	5	10	10	10	10	10	10	10	10	10	10	points

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

iii. How many months did the effluent TSS concentration (Col. 2) exceed 90% of 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	months
points	0	0	10	20	30	40	40	40	40	40	40	40	40	points

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

iv. How many months did the effluent TSS concentration (Col.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	months
points	0	5	5	10	10	10	10	10	10	10	10	10	10	points

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 on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

D. Other Monitoring and Limits

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, residual chlorine, or fecal coliform?

✓ Check one box X Yes No If yes, please describe:

(7) Fecal WkAvg Geo Max Exception
(1) Fecal MOAVG GEO Noncompliance – May, July, August (due to Ida)

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 X No If yes, please describe:

None

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

✓ Check one box Yes X No If yes, please describe:

No toxic substances analyzed as per the LPDES Permit.

Facility Name

City of Mandeville-Hickory St.

PART 3: AGE OF THE WASTEWATER TREATMENT FACILITIES

A. What year was the wastewater treatment plant constructed or last major expansion/improvements completed?
2022

Current Year - (Answer to A) = Age in years

2023 - 2022 = 1 years

Enter Age in Part C below.

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

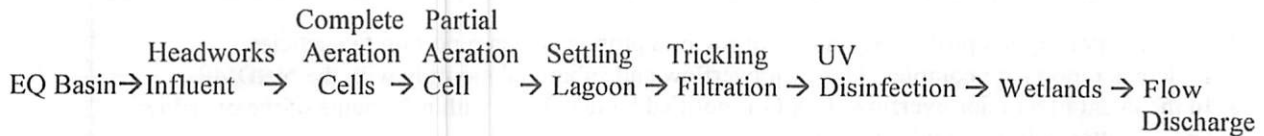
	Factor
<input type="checkbox"/> Mechanical Treatment Plant (Trickling filter, activated sludge, etc.) Specify Type <u>Activated Sludge</u>	2.5
<input checked="" type="checkbox"/> Aerated Lagoon	2.0
<input type="checkbox"/> Stabilization Pond	1.5
<input type="checkbox"/> Other (Specify) _____	1.0

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 of Part 3:

TOTAL POINT VALUE FOR PART 3 = **2.0** x **1** = 2 **(max = 50)**
FACTOR AGE

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

D. Please attach a schematic of the treatment plant.



Facility Name

City of Mandeville-Hickory St.

PART 4: OVERFLOWS AND BYPASSES

- A. (1) 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: 5
 (Circle One) 0 = 0 points 1 = 5 points 2 = 10 points
 3 = 15 points 4 = 30 points **X 5 or more = 50 points**
- (2) List the number of bypasses, overflows, or unpermitted discharges shown in A (1) that were within the collection system and the number at the treatment plant.

Collection System 5 Treatment Plant 0

- B. (1) List the number of times in the last year there was a bypass or overflow 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
 (Circle One) 0 = 0 points 1 = 5 points 2 = 10 points
 3 = 15 points 4 = 30 points **X 5 or more = 50 points**
- (2) List the number of bypasses or overflows shown in B (1) that were within the collection system and the number at the treatment plant.

Collection System) 10 Treatment Plant 0

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

There were no bypasses. All overflows from the City collection system

- D. Add the point values circled 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 on the point calculation table on page 16.

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

Keith J. LaGrange, P.E.– Director of Public Works

Describe the procedure for gathering, compiling, and reporting:

The operator reports problems, supervisor reviews problems then reporting to agencies. Incidents reports are completed on each overflow and submitted monthly with the NetDMR. In the event of a major overflow, LDEQ is notified by telephone within 24 hours of the overflow and a written follow-up within 7 days.

Facility Name

City of Mandeville-Hickory St.

PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storage

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

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

					*	
months	<2	2	3	4 to 5	>6	months
points	50	30	20	10	0	Points

Write 0, 10, 20, 30, or 50 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 corresponding point total. Write the point total in the box below at the right.

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

Write 0, 10, 20, 30, or 50 in the B point total box B Point Total

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

TOTAL POINT VALUE FOR PART 5 (max=100)

Also enter this value on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

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: 300 new homes (est with St. Tammany Parish)

Design Flow: 0.120 MGD

Design BOD₅: 200 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)?

(Circle One)

NoX = 0 points

Yes = 15 points

Describe: NONE

List any new pollutants: NONE NA

- 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?

(Circle One)

No = 0 points

YesX = 15 points

Describe: New Residential Development-single and multi family housing. Commercial Zone annexation and agreement with St. Tammany Parish

List any new pollutants that you anticipate: sanitary waste

- D. Add together the point value circled in B and C and place the sum in the blank below.

TOTAL POINT VALUE FOR PART 6 15 (max=30)

Also enter this value on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

PART 7: OPERATOR CERTIFICATION AND EDUCATION

- A. What was the name of the operator-in-charge for the reporting year? Gerard Hopkins
- B. What is his/her certification number 37093 Cert. #
- C. What level of certification is the operator-in-charge required to have to operate the wastewater treatment plant? III Level Required
- D. What is the level of certification of the operator-in-charge? III 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 X 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 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 or more = 0 points Less than 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 and training for wastewater treatment plant employees? Check one box X yes no

Explain:

Operator responsible for informing Superintendent of continuing needs

- I. What percentage of the continuing education expenses of the operator-in-charge were paid for:
By the permittee? 100%
By the operator? _____
- J. Add together the E and G point values and place this sum in the box below at the right:

TOTAL POINT VALUE FOR PART 7 (max=100)

Also enter this value on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

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 being financed?

Explain:

User fees cover O&M costs for the facility.

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

User Fees revenues, sewer impact fees and 1 % sales tax.

PART 9: SUBJECTIVE EVALUATION

A. Collection System Maintenance

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

Repair/replace gravity lines and force main, general maintenance, Repair Pond aerators, Dredge Pond, maintenance to UV system, and cleaned trickling filter media. Repairs to effluent flow meters at the Outfall.

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

General overhauled of a few lift stations in 2022. Repair pumps, wetwell improvements, repair floats, service/repair valves, SCADA, and review electrical controls.

3. What collection system improvements does the community have under consideration for the next 5 years?

I&I repairs based on smoke testing and camera work is on-going along with routine line inspection. Routine lift station repairs and upgrades.

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

- | | |
|--|---|
| 1. Do you have duckweed buildup in your ponds? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 2. Do you mow your dikes regularly (at least monthly), to the waters edge? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Do you have bushes or trees growing on the dikes or in the ponds? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 4. Do you have excess sludge buildup (>1 foot) on the bottom of any of your ponds? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Do you exercise all of your valves? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 6. Are your control manholes in good structural shape? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. Do you maintain at least three feet of freeboard in all your ponds? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 8. Do you visit your pond system, at least weekly? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Facility Name

City of Mandeville-Hickory St.

C. Treatment Plants

1. Have the influent and effluent flow meters been calibrated in the last year? Yes No

Influent flow meter calibration date(s):

Effluent flow meter calibration date(s):

N/A	2/22/2022
-----	-----------

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

Power failures from storms, heavy rainfall, low Pond aeration and alternating wetland discharges.

3. Is your community presently involved in formal planning for treatment facility upgrading?

Yes No If yes, describe:

The City continues to operate the plant and wetlands discharge. Mandeville is operating under the wetlands permit and currently discharges into two wetlands as per the LPDES permit. The Utility Department has approved Pond dredging project to remove excess Biosolids, Aeration upgrades have been completed in conjunction with solids removal. Rock-reed filter maintenance is being considered. Effluent pumps have been replaced and Plant headworks upgrades/rehab.

Facility Name

City of Mandeville-Hickory St.

D. Preventive Maintenance

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

X Yes No If yes, describe:

Written maintenance schedule with a card file system is used for PM. Engineers provided O&M manuals for new upgrade equipment.

2. 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

3. Are these preventive maintenance tasks, as well as equipment problems, being recorded and filed so future maintenance problems can be assessed properly? X Yes No

E. Sewer Use Ordinance

1. 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 from industries, commercial users, and residences?

X Yes No If yes, describe:

City ordinance 17-89 covers discharges. A ordinance, including some non-domestic controls, is being considered at this time.

2. Has it been necessary to enforce? X Yes No If yes, describe:

All grease trap requirements are enforced and dumping of marine sanitary discharges is controlled.

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

Mandeville will continue to review the non-domestic ordinance idea during 2023 and rehab the collection system and lift station as required.

Facility Name

City of Mandeville-Hickory St.

POINT CALCULATION TABLE

Fill in the values from parts 1 through 7 in the columns below. Add the numbers in the left column to determine the point total that the wastewater system has generated for the previous year.

Actual Values	Actual Values	Maximum
Part 1: Influent Flow/Loadings	<u> 0 </u>	80 Points
Part 2: Effluent Quality/Plant Performance	<u> 0 </u>	100 Points
Part 3: Age of WWTT	<u> 2 </u>	50 Points
Part 4: Overflows and Bypasses	<u> 100 </u>	100 Points
Part 5: Ultimate Disposition of Sludge	<u> 0 </u>	100 Points
Part 6: New Development	<u> 15 </u>	30 Points
Part 7: Operator Certification Training	<u> 0 </u>	100 Points

TOTAL POINTS

117

**MWPP RESOLUTION
CITY OF MANDEVILLE**

Resolved that City of Mandeville Administration and Council informs Louisiana Department of Environmental Quality that the following actions were taken by the _____ Administration and Council for Mandeville _____ (governing body).

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 - i. Continue to monitor and rehab all areas identified as "problem areas" of the collection system and investigate potential solutions to rainfall events causing collection system overflows.
 - j. Continue to upgrade collection system lift stations and investigate methods of minimizing power outages.
 - k. Comply with DEQ Lab certification requirements, QA/QC monitoring procedures and new electronic data submission requirements.

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

CLERK

LOUISIANA

MUNICIPAL WATER

POLLUTION PREVENTION

MWPP



Facility Name:

City of Mandeville

LWDPS Permit Number:

LA0038288

NPDES Permit Number:

Address:

*3101 Causeway Approach
Mandeville La, La. 70448-3592*

Parish:

St. Tammany Parish

(Person Completing Form) Name:

David Curtis, P.E.

Title:

Operations Manager - CES, Inc.

Date Completed:

03/01/2023

Instructions to the Operator-in-Charge

- 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.**
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- 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. The 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.**

PART 1: INFLUENT FLOW/LOADINGS

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.

Col. 1 Average Monthly Flow (million gallons per day, MGD)		Col. 2 Average Monthly BOD ₅ Concentration (mg/l)		Col. 3 Average Monthly BOD ₅ Loading (pounds per day)
1.508	X	186.6	X 8.34 =	1568.8
1.033	X	198.1	X 8.34 =	1706.7
0.997	X	229.0	X 8.34 =	1904.1
1.644	X	189.5	X 8.34 =	2598.2
0.958	X	170.8	X 8.34 =	1364.6
0.868	X	166.7	X 8.34 =	1206.8
0.977	X	162.4	X 8.34 =	1323.3
1.934	X	159.9	X 8.34 =	2579.1
1.547	X	142.6	X 8.34 =	1839.8
0.745	X	142.4	X 8.34 =	884.8
1.710	X	120.0	X 8.34 =	1711.4
2.070	X	173.9	X 8.34 =	3002.2

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 Manual (O & M) or contact your consulting engineer.

Design Flow, MGD	4.00	X 0.90 =	3.60
Design BOD, lb/day	6676		6008

Facility Name

City of Mandeville-Hickory St.

C. How many months did the monthly flow (Col. 1) to the wastewater treatment plant (WWTP) exceed 90% of 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	months
points	0	0	0	0	0	5	5	5	5	5	5	5	5	points

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

D. How many months did the monthly flow (Col. 1) to the WWTP 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	months
points	0	5	5	10	10	15	15	15	15	15	15	15	15	points

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

E. How many months did the monthly BOD loading (Col. 3) to the WWTP 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	months
points	0	0	5	5	5	10	10	10	10	10	10	10	10	points

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

F. How many times did the monthly BOD loading (Col. 3) to the WWTP 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	months
points	0	10	20	30	40	50	50	50	50	50	50	50	50	points

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 on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

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 Avg. Monthly BOD (mg/l)	Column 2 Avg. Monthly TSS (mg/l)
January	12	9
February	19	10
March	18	13
April	14	11
May	11	13
June	11	8
July	9	5
August	13	8
September	8	9
October	4	5
November	8	7
December	12	9

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

	Permit Limit		90% of Permit Limit
BOD, mg/l	30	X 0.90 =	27
TSS, mg/l	90	X 0.90 =	81

Facility Name

City of Mandeville-Hickory St.

C. Continuous Discharge to Surface Water

i. How many months did the effluent BOD concentration (Col. 1) exceed 90% of 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	months
points	0	0	10	20	30	40	40	40	40	40	40	40	40	points

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

ii. How many months did the effluent BOD concentration (Col. 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	months
points	0	5	5	10	10	10	10	10	10	10	10	10	10	points

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

iii. How many months did the effluent TSS concentration (Col. 2) exceed 90% of 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	months
points	0	0	10	20	30	40	40	40	40	40	40	40	40	points

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

iv. How many months did the effluent TSS concentration (Col.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	months
points	0	5	5	10	10	10	10	10	10	10	10	10	10	points

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 on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

D. Other Monitoring and Limits

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, residual chlorine, or fecal coliform?

✓ Check one box X Yes No If yes, please describe:

(7) Fecal WkAvg Geo Max Exception
(1) Fecal MOAVG GEO Noncompliance – May, July, August (due to Ida)

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 X No If yes, please describe:

None

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

✓ Check one box Yes X No If yes, please describe:

No toxic substances analyzed as per the LPDES Permit.

Facility Name

City of Mandeville-Hickory St.

PART 3: AGE OF THE WASTEWATER TREATMENT FACILITIES

A. What year was the wastewater treatment plant constructed or last major expansion/improvements completed?
2022

Current Year - (Answer to A) = Age in years

2023 - 2022 = 1 years

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 <u>Activated Sludge</u>	2.5
<input checked="" type="checkbox"/> Aerated Lagoon	2.0
<input type="checkbox"/> Stabilization Pond	1.5
<input type="checkbox"/> Other (Specify) _____	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 of Part 3:

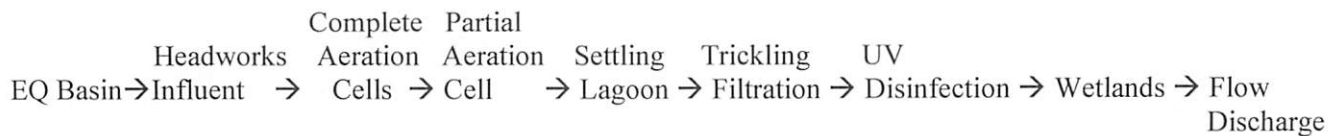
TOTAL POINT VALUE FOR PART 3 = 2.0 x 1 =
FACTOR AGE

2

(max = 50)

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

D. Please attach a schematic of the treatment plant.



PART 4: OVERFLOWS AND BYPASSES

- A. (1) 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: 5
 (Circle One) 0 = 0 points 1 = 5 points 2 = 10 points
 3 = 15 points 4 = 30 points X 5 or more = 50 points
- (2) List the number of bypasses, overflows, or unpermitted discharges shown in A (1) that were within the collection system and the number at the treatment plant.

Collection System 5 Treatment Plant 0

- B. (1) List the number of times in the last year there was a bypass or overflow 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
 (Circle One) 0 = 0 points 1 = 5 points 2 = 10 points
 3 = 15 points 4 = 30 points X5 or more = 50 points
- (2) List the number of bypasses or overflows shown in B (1) that were within the collection system and the number at the treatment plant.

Collection System) 10 Treatment Plant 0

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

There were no bypasses. All overflows from the City collection system

- D. Add the point values circled 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 on the point calculation table on page 16.

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

Keith J. LaGrange, P.E.– Director of Public Works

Describe the procedure for gathering, compiling, and reporting:

The operator reports problems, supervisor reviews problems then reporting to agencies. Incidents reports are completed on each overflow and submitted monthly with the NetDMR. In the event of a major overflow, LDEQ is notified by telephone within 24 hours of the overflow and a written follow-up within 7 days.

Facility Name

City of Mandeville-Hickory St.

PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storage

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

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

*

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

Write 0, 10, 20, 30, or 50 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 corresponding point total. Write the point total in the box below at the right.

*

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

Write 0, 10, 20, 30, or 50 in the B point total box B Point Total

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

TOTAL POINT VALUE FOR PART 5 (max=100)

Also enter this value on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

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: 300 new homes (est with St. Tammany Parish)

Design Flow: 0.120 MGD

Design BOD₅: 200 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)?

(Circle One) NoX = 0 points Yes = 15 points

Describe: NONE

List any new pollutants: NONE NA

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?

(Circle One) No = 0 points YesX = 15 points

Describe: New Residential Development-single and multi family housing. Commercial Zone annexation and agreement with St. Tammany Parish

List any new pollutants that you anticipate: sanitary waste

D. Add together the point value circled in B and C and place the sum in the blank below.

TOTAL POINT VALUE FOR PART 6 15 (max=30)

Also enter this value on the point calculation table on page 16.

PART 7: OPERATOR CERTIFICATION AND EDUCATION

- A. What was the name of the operator-in-charge for the reporting year? Gerard Hopkins
- B. What is his/her certification number 37093 Cert. #
- C. What level of certification is the operator-in-charge required to have to operate the wastewater treatment plant? III Level Required
- D. What is the level of certification of the operator-in-charge? III 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 X 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 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 or more = 0 points Less than 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 and training for wastewater treatment plant employees? Check one box X yes no

Explain:

Operator responsible for informing Superintendent of continuing needs

- I. What percentage of the continuing education expenses of the operator-in-charge were paid for:
By the permittee? 100%
By the operator? _____
- J. Add together the E and G point values and place this sum in the box below at the right:

TOTAL POINT VALUE FOR PART 7 (max=100)

Also enter this value on the point calculation table on page 16.

Facility Name

City of Mandeville-Hickory St.

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 being financed?

Explain:

User fees cover O&M costs for the facility.

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

User Fees revenues, sewer impact fees and 1 % sales tax.

PART 9: SUBJECTIVE EVALUATION

A. Collection System Maintenance

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

Repair/replace gravity lines and force main, general maintenance, Repair Pond aerators, Dredge Pond, maintenance to UV system, and cleaned trickling filter media. Repairs to effluent flow meters at the Outfall.

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

General overhauled of a few lift stations in 2022. Repair pumps, wetwell improvements, repair floats, service/repair valves, SCADA, and review electrical controls.

3. What collection system improvements does the community have under consideration for the next 5 years?

I&I repairs based on smoke testing and camera work is on-going along with routine line inspection. Routine lift station repairs and upgrades.

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

- | | |
|--|---|
| 1. Do you have duckweed buildup in your ponds? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 2. Do you mow your dikes regularly (at least monthly), to the waters edge? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Do you have bushes or trees growing on the dikes or in the ponds? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 4. Do you have excess sludge buildup (>1 foot) on the bottom of any of your ponds? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 5. Do you exercise all of your valves? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 6. Are your control manholes in good structural shape? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. Do you maintain at least three feet of freeboard in all your ponds? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 8. Do you visit your pond system, at least weekly? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Facility Name

City of Mandeville-Hickory St.

C. Treatment Plants

1. Have the influent and effluent flow meters been calibrated in the last year? Yes No

Influent flow meter calibration date(s):

Effluent flow meter calibration date(s):

N/A	2/22/2022
-----	-----------

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

Power failures from storms, heavy rainfall, low Pond aeration and alternating wetland discharges.

3. Is your community presently involved in formal planning for treatment facility upgrading?

Yes

No If yes, describe:

The City continues to operate the plant and wetlands discharge. Mandeville is operating under the wetlands permit and currently discharges into two wetlands as per the LPDES permit. The Utility Department has approved Pond dredging project to remove excess Biosolids, Aeration upgrades have been completed in conjunction with solids removal. Rock-reed filter maintenance is being considered. Effluent pumps have been replaced and Plant headworks upgrades/rehab.

D. Preventive Maintenance

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

X Yes No If yes, describe:

Written maintenance schedule with a card file system is used for PM. Engineers provided O&M manuals for new upgrade equipment.

2. 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

3. Are these preventive maintenance tasks, as well as equipment problems, being recorded and filed so future maintenance problems can be assessed properly? X Yes No

E. Sewer Use Ordinance

1. 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 from industries, commercial users, and residences?

X Yes No If yes, describe:

City ordinance 17-89 covers discharges. A ordinance, including some non-domestic controls, is being considered at this time.

2. Has it been necessary to enforce? X Yes No If yes, describe:

All grease trap requirements are enforced and dumping of marine sanitary discharges is controlled.

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

Mandeville will continue to review the non-domestic ordinance idea during 2023 and rehab the collection system and lift station as required.

Facility Name

City of Mandeville-Hickory St.

POINT CALCULATION TABLE

Fill in the values from parts 1 through 7 in the columns below. Add the numbers in the left column to determine the point total that the wastewater system has generated for the previous year.

Actual Values	Actual Values	Maximum
Part 1: Influent Flow/Loadings	<u> 0 </u>	80 Points
Part 2: Effluent Quality/Plant Performance	<u> 0 </u>	100 Points
Part 3: Age of WWTT	<u> 2 </u>	50 Points
Part 4: Overflows and Bypasses	<u>100</u>	100 Points
Part 5: Ultimate Disposition of Sludge	<u> 0 </u>	100 Points
Part 6: New Development	<u> 15 </u>	30 Points
Part 7: Operator Certification Training	<u> 0 </u>	100 Points

TOTAL POINTS

117

**MWPP RESOLUTION
CITY OF MANDEVILLE**

Resolved that City of Mandeville Administration and Council informs Louisiana Department of Environmental Quality that the following actions were taken by the Administration and Council for Mandeville
_____ (governing body).

1. Reviewed 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 Water Discharge Permit System (LPDES) number LA0038288.
 - a. Continue to provide certified operators for collection and operation by providing 16 hours of training per operator over the next year. This training will be conducted through off-site classes and with the assistance of CES, Inc.
 - b. The City will continue to video and smoke test to identify I&I problem areas.
 - c. Investigate City non-domestic user Ordinance during 2023, consider conducting a non-domestic user survey to identify system users.
 - d. The City will continue to work with its environmental consultant to increase monitoring of Ponds and maintain both wetland discharges as per the LPDES Permit project.
 - e. Monitor wetland discharges and ensure proper wetland loadings for permit compliance.
 - f. Continue the dredging of the Pond to remove excess solids and continue maintenance to maintain rock-reed filtration efficiency.
 - g. Continue to supply and consider additional aeration to ensure proper influent treatment and proper biological reduction.
 - h. The City will ensure proper operation of the treatment system through on-going testing, monitoring influents and using the EQ Basin when necessary.
 - i. Continue to monitor and rehab all areas identified as “problem areas” of the collection system and investigate potential solutions to rainfall events causing collection system overflows.
 - j. Continue to upgrade collection system lift stations and investigate methods of minimizing power outages.
 - k. Comply with DEQ Lab certification requirements, QA/QC monitoring procedures and new electronic data submission requirements.

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

CLERK