



# Lafayette Renew Monthly Informational Report April 2022

Page 1

Daily Plant Capacity (peak)—66 MGD

Lift Stations—27

Collection System Maintained—484.21 miles

Storm Pumping Stations—3

**Precipitation Total: 2.57" inches\***  
\*Total taken from daily average of five rain gauges

- \* CSO LTCP Phase II-C: complete installation of solar panel base, continue installation of solar panels, spread topsoil. \*
- \* 2021 Sanitary Sewer Rehabilitation: liner installation complete, manhole lining complete, begin surface restoration. \*
- \* Service Area 11B: progress meeting for preliminary sanitary sewer and water main sizing and routes outlined. \*
  - \* Ortman Lane Drainage: bid opening, pre-bid meeting held. \*
  - \* Personnel completed Operator Certification training. \*

\* Training seminars for Fall Protection, Confined Space, Excavation & Trenching, Qualified Rigger, and Qualified Signal Person were attended by personnel. \*

Monthly Reports Submitted to the Indiana Department of Environmental Management (IDEM)

Report of Operation, Discharge Monitoring Report and Combined Sewer Overflow Report

Work Performed

- \* Disinfection season began April 1.
  - \* Worked on new Flyte pump, electrical, and SCADA communication issues.
  - \* Tested different polymers for the Volute press to find most effective product.
  - \* Pumped down headworks wet-wells to remove grit from system.
  - \* Pressure washed Volute press and equipment; also steps and walkways were added for easier access to the machine.
  - \* Pumped down two final clarifiers for work done on the scum troughs.
  - \* Dropped and inspected both grit removal tanks.
  - \* 703,616 gallons of digested sludge from storage tanks dewatered for land application program.
- Necessary ground maintenance for the treatment plant was performed, daily equipment rotations continue, as well as record keeping and proper sampling procedures required by our NPDES permit.

The Operations Department continues to run a very efficient process well within our NPDES permit limits.

## Operations

APRIL	2022	2021
Wastewater Treated (MG)	629.9	472.3
Average % Solids Removed	96.3%	94.4%
Biosolids Generated (MG)	2.13 MG	2.24 MG
BOD % Removed	94.3%	95.3%
Cubic Ft. of Methane Produced (Million cubic feet)	2.99 ft <sup>3</sup>	2.78 ft <sup>3</sup>
Phosphorus	78.1%	80.4%
Ammonia Overall Treatment	95.9%	99.5%

## Laboratory

2810 Tests Performed in April

- 503 Biochemical Oxygen Demand (BOD) tests on Plant, River, and Industrial samples
- 1274 Total Suspended Solids and 480 Total Volatile Solids
- 180 pH tests on wastewater and sludges
- 180 Settleable solids were conducted on the mixed liquors
- 86 Plant and River samples for Ammonia
- 38 Ecoli analysis on Plant and River samples
- 143 Total Solids and Volatile Solids tests on sludges
- 19 Industry and River samples for independent analysis
- 108 Phosphorous tests on Plant, River, and Ditch samples
- Plant and river samples were tested for the following for additional NPDES permit requirements:
  - \* 5 TKN (total kjeldahl nitrogen)
  - \* 5 Nitrate
  - \* 5 Nitrite
  - \* 49 Total Nitrogen
- 120 Chlorine samples on plant effluent samples were checked
- 58 Waste hauler samples were collected and checked

## Maintenance

Work Performed at Treatment Plant

- \* Roof drain repaired in fine screen room by fine screen dumpster.
- \* Repaired leaks on grit washer influent line.
- \* Bleach building had clamps replaced on bleach distribution line.
- \* Rebuilt polymer pumps in the thickener building.
- \* Welded keypad stand at the entrance to the Waterworks plant.
- \* Replaced #2 grit tank drain line valve in the tunnel.

Work Performed at Lift Stations

- \* Preventative maintenance and grounds maintenance performed at all lift stations.
- \* Installed rebuilt pump in #1 position at Prairie Oaks.
- \* Replaced pressure transducer for level indication at McCarty Lane.

# Lafayette Renew Monthly Informational Report

April 2022

Page 2

## Stormwater

### STORMWATER MONTHLY NUMBERS

APRIL	2022	2021		2022	2021
Stormwater Calls	4	7	Catch Basin Repaired	4	0
Erosion Control Inspections	68	55	Ft. of Storm Sewer Jet Clean	54	425
Sweeper Debris Removal (tons)	362.8	174.3	Catch Basins Vac Cleaned	10	7
Catch Basin Calls	1	6	Sweeper Call	2	14

### Work Performed

- \* Pre-construction meetings attended for erosion control measures.
- \* Performed two Best Management Practice (BMP) Inspections throughout the City and worked on Illicit Discharge Detection and Elimination (IDDE) program.
- \* Maintenance performed on bio-swailes at Veteran's Memorial Parkway (VMP), Maple Point Drive, and Concord Road, on rain gardens at the County Courthouse and on North Street, and on Jeff High School Storm Park.
- \* Grounds maintenance performed at 20 City-owned properties.
- \* Storm sewer preventative maintenance performed in the area of: Union St. to Cason St. and N. 26th St. to Earl Ave.
- \* Assisted Purdue students with install of rain garden at City fueling station at 2nd & Alabama Streets.
- \* Repaired spillway, performed a pipe repair and installed rip rap at Heron Bay pond.
- \* Perennial flowers planted in rain gardens at 6th & Main Streets.
- \* Began preventative maintenance program for new Cyclone sweeper for pavers on Brown & North Streets.

## Surveillance

### Performed Surveillance

**SIGNIFICANT:** SIA, Industrial Plating, Ice Cream Specialties, ZF, and Primary Products (Tate South)

**GENERAL:** none

### Annual Industrial Pretreatment Inspections

Rea Magnet and Industrial Plating

### Grease Traps

Interior Insp. - 23	Plan Reviews - 5
Exterior Insp. - 55	Rough-in Insp. - 1
Oil/Grit Sep. Insp. - 23	Under Slab Insp. - 1
Business Compliance Meetings - 3	Final Insp. - 1

### Work Performed

- \* Industrial meters read for billing purposes.
- \* River sampling performed.
- \* Durkees Overflow data downloaded for monthly report.
- \* Annual Pretreatment Report was submitted to the Environmental Protection Agency (EPA) and IDEM.
- \* Local commercial businesses MS4 Requirements completed.
- \* Cargill's Significant Industrial User permit renewal approved by Board of Public Works and Safety.
- \* Whole Effluent Toxicity (WET) Test completed, passed, and submitted to IDEM.
- \* Personnel attended Pretreatment Conference and received their Pretreatment Coordinator Certification.

### Biosolids Land Application Program

- ◆ Volute press (landfilled) - 106.17 dry tons
- ◆ The monthly Land Application of Biosolids report was submitted to IDEM.

## Sewers

### SEWER MONTHLY NUMBERS

APRIL	2022	2021		2022	2021
Backup Calls	7	16	Manhole Frames Raised	2	0
City Blockages	0	1	Manholes Repaired	0	0
Sanitary Calls	7	10	Ft. of Sanitary Sewer Repaired	0	0
Odor Calls	1	6	Ft. of Sewer Jet Cleaned	630	428
Tap Inspections	30	47	Ft. of Sewer Jet Cleaned—PM	32,137	113,035
Sewer Locates	1,387	1,197	Ft. of Sewer Televised	379	10,206

### Work Performed

- \* Preventative maintenance performed throughout the City.
- \* Inspected Combined Sewer Overflow Structures.
- \* Manhole checks performed in the Prairie Oaks subdivision area.
- \* Cleaned catch basins throughout the City.
- \* Installed storm sewer at Columbian Park.
- \* Patched City sanitary sewer near 1413 S 5th Street.
- \* Personnel attended Traffic Schooling at the Waterworks plant.