



Lafayette Renew

Monthly Informational Report

March 2022

Daily Plant Capacity (peak)—66 MGD

Lift Stations—27

Collection System Maintained—484.21 miles

Storm Pumping Stations—3

Precipitation Total: 3.02" inches*
*Total taken from daily average of five rain gauges

- * CSO LTCP Phase II-C: continue installation of solar panel base and site work, poured ventilation concrete structure, begin installation of solar panels. *
- * 2021 Sanitary Sewer Rehabilitation: begin liner installation. *
- * Rome Drive Lift Station Rehab: pre-con meeting held. *
- * Ortman Lane Drainage: Request to Advertise to Bid submitted to BOW. *
- * S. 30th Street Drainage Phase II: pre-con meeting held, begin brush clearing and installation of construction entrance. *
- * 6th Street Water Relief Pumping Station: finals plans submitted. *

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

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

Work Performed

- * New waste dumpster conveyance system for fine screenings dumpster area and for grit and volute press solids dumpster area completed and is now in use.
- * Worked on new Flyte pump, electrical, and SCADA communication issues.
- * Pumped down headworks wet-wells to remove grit from system.
- * Dropped and cleaned Chlorine contact tank.
- * Pumped down headworks wet wells to remove grit from system.
- * Tested disinfection system, made repairs as needed in preparation for chemical season that will begin April 1.
- * Dropped and inspected both grit removal tanks.
- * 1,401,165 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

MARCH	2022	2021
Wastewater Treated (MG)	672.8	573.7
Average % Solids Removed	96.5%	94.7%
Biosolids Generated (MG)	2.1 MG	2.48 MG
BOD % Removed	96.8%	96.8%
Cubic Ft. of Methane Produced (Million cubic feet)	3.5 ft ³	2.76 ft ³
Phosphorus	79.4%	83.0%
Ammonia Overall Treatment	93.8%	99.7%

Laboratory

2434 Tests Performed in March

- 442 Biochemical Oxygen Demand (BOD) tests on Plant, River, and Industrial samples
- 1128 Total Suspended Solids and 403 Total Volatile Solids
- 186 pH tests on wastewater and sludges
- 186 Settleable solids were conducted on the mixed liquors
- 69 Plant and River samples for Ammonia
- 5 Ecoli analysis on Plant and River samples
- 133 Total Solids and Volatile Solids tests on sludges
- 53 Industry and River samples for independent analysis
- 107 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
 - * 30 Total Nitrogen
- 59 Waste hauler samples were collected and checked
- New employee training

Maintenance

Work Performed at Treatment Plant

- * Sampler antennas relocated for headworks influent & primary effluent.
- * Repaired rotork valves on #1 & #4 aeration tank feed.
- * Debris removed from return sludge pump #13 in #7 final tank.
- * Replaced 8" tee on discharge line for grit washers in fine screen room.
- * In bleach building, leaks on bleach pump influent & effluent lines repaired and 2" valves on fill lines for bleach holding tanks replaced.
- * Cleaned Chlorine contact tank and repaired skimmer trough.
- * Refrigeration unit on plant influent sampler in headworks replaced.
- * Replaced worn out piping for #1 grit washer influent line.
- * Low water switch replaced on #2 gravity belt thickener.
- * Caster wheels replaced on #1 coarse screen dumpster.
- * Replaced #1 ferric pump housing in thickener building.

Work Performed at Lift Stations

- * Preventative maintenance and grounds maintenance performed at all lift stations.
- * Replaced run timer on #2 pump at Raineybrook.
- * Rebuilt #1 pump for 40 & 8.
- * Debris removed from #1 and #2 pump at Butler Meadows.

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Page 2

Stormwater

STORMWATER MONTHLY NUMBERS

MARCH	2022	2021		2022	2021
Stormwater Calls	4	9	Catch Basin Repaired	1	1
Erosion Control Inspections	33	82	Ft. of Storm Sewer Jet Clean	266	0
Sweeper Debris Removal (tons)	320.3	220	Catch Basins Vac Cleaned	3	0
Catch Basin Calls	4	3	Sweeper Call	17	19

Work Performed

- * Pre-construction meetings attended for erosion control measures.
- * Performed 11 Best Management Practice (BMP) Inspections throughout the City and worked on Illicit Discharge Detection and Elimination (IDDE) program.
- * Maintenance performed on bio-swales 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 16 City-owned properties.
- * Completed installation of new curtain assemblies for sweepers.
- * Installed 175' of new storm pipe and four sanitary and storm structures at Cat Park.
- * Bio-swales sprayed for poison hemlock.
- * Trash picked up in rain gardens and bio-swales, as well as tree and tree branch removal in bio-swales and storm park.
- * Removed debris from drainage area across from Renew plant.
- * Storm manhole bladder inspections completed.
- * BMP maintenance completed on Jeff Storm Park detention area.

Surveillance

Performed Surveillance

SIGNIFICANT: Rea Magnet, Fairfield (DANA), ZF, Nanshan, Arconic, Industrial Plating, and Ice Cream Specialties

GENERAL: Southwire and Foodliner

Annual Industrial Pretreatment Inspections

ZF and Kelly Construction

Grease Traps

Interior Insp. - 13	Plan Reviews - 5
Exterior Insp. - 67	Rough-in Insp. - 5
Oil/Grit Sep. Insp. - 40	Under Slab Insp. - 3
Business Compliance Meetings - 0	Final Insp. - 2

Work Performed

- * Industrial meters read for billing purposes.
- * River sampling performed.
- * Durkees Overflow data downloaded for IDEM monthly report.
- * Research continues on MS4 Requirements for local commercial businesses.
- * Annual Pretreatment Report was submitted to the Environmental Protection Agency (EPA) and IDEM.
- * Tate & Lyle South permit renewal and name change approved by Board of Public Works and Safety; they are now named Primary Products.
- * Preventative maintenance performed on rain gauge @ 18th & Teal Road.
- * Nitrate & Total Nitrogen sampling conducted on Renew's three main trunks of the collection system.
- * Distributed educational grease flyers to residents near Miami Elementary School.

Biosolids Land Application Program

- ◆ Volute press (landfilled) - 19.02 dry tons
- ◆ The monthly Land Application of Biosolids report and Sludge Analysis was submitted to IDEM.

Sewers

SEWER MONTHLY NUMBERS

MARCH	2022	2021		2022	2021
Backup Calls	24	35	Manhole Frames Raised	0	0
City Blockages	1	4	Manholes Repaired	3	0
Sanitary Calls	16	15	Ft. of Sanitary Sewer Repaired	0	3
Odor Calls	5	1	Ft. of Sewer Jet Cleaned	1,697	370
Tap Inspections	47	52	Ft. of Sewer Jet Cleaned—PM	0	0
Sewer Locates	1,208	1,078	Ft. of Sewer Televised	1,373	6,995

Work Performed

- * Preventative maintenance performed throughout the City.
- * Inspected Combined Sewer Overflow Structures.
- * Manhole checks performed in the Prairie Oaks subdivision area.
- * Repairs made as needed on snow plows.
- * Installed 250' sanitary pipe & two manholes at Columbian Park.
- * Installed 316' of new sanitary pipe at Cat Park with assistance from Stormwater personnel.
- * Blockage follow-up performed on Strawhat Drive.
- * Concrete removed around MatchBOX Coworking Studio to assist with drainage.