



Monthly Informational Report

April 2023

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Daily Plant Capacity (peak)—66 MGD

Storm Pumping Stations—3

Collection System Maintained—484.78 miles

Lift Stations—27

Precipitation Total: 1.52 inches*

*Total taken from daily average of five rain gauges

* Vinton Woods Stormwater Conveyance: excavation began on pond 2 of 3.

* Approved by BOW:

— Aeration Improvements: Design Contract w/ Greeley & Hansen

— 2023 Sewer Rehab (lining): Design Contract w/ Wessler Engineering

* Personnel prepped and planned for the Indiana Wastewater Operator Challenge being held at the WWTP in May.

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

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

Work Performed

- * Aeration basins and final clarifiers taken offline for gate replacement.
 - * #4 digester taken offline for cleaning inspection and draft tube mixer replacement.
 - * Pumped down headworks wet well to remove grit from the system.
 - * Metal fabrication project at headworks building completed by an outside contractor.
 - * Pressure washed equipment and dumpster areas.
 - * Fine screen channels flushed and exercised the gates.
 - * 481,600 gallons of digested sludge from storage tanks dewatered for land application program and personnel assisted with loading sludge trucks.
- 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.

Operations

APRIL	2023	2022
Wastewater Treated (MG)	523.2	629.9
Average % Solids Removed	96.6%	96.3%
Biosolids Generated (MG)	2.2 MG	2.13 MG
BOD % Removed	96.6%	94.3%
Cubic Ft. of Methane Produced (Million cubic feet)	2.96 ft ³	2.99 ft ³
Phosphorus	81.9%	78.1%
Ammonia Overall Treatment	93.9%	95.9%

Laboratory

2806 Tests Performed in March

- 521 Biochemical Oxygen Demand (BOD) tests on Plant, River, and Industrial samples
- 1286 Total Suspended Solids and 480 Total Volatile Solids
- 180 pH tests on wastewater and sludges
- 180 Settleable solids were conducted on the mixed liquors
- 79 Plant and River samples for Ammonia
- 38 E.coli analysis on Plant and River samples
- 138 Total Solids and Volatile Solids tests on sludges
- 48 Industry and River samples for independent analysis
- 121 Phosphorous tests on Plant, River, and Ditch samples
- 120 Chlorine samples on plant effluent samples were checked
- Plant and river samples were tested for the following for additional NPDES permit requirements:
 - * 5 TKN (total kjeldahl nitrogen)
 - * 12 Nitrate
 - * 5 Nitrite
 - * 15 Total Nitrogen
- 45 Waste hauler samples were collected and checked

Maintenance

Work Performed at Treatment Plant

- * Replaced #15 return activated sludge pump on #7 final clarifier.
- * #1 and #2 polymer pump in the thickener building repaired.
- * Repaired #1 and #2 water drip pot and replaced #1A recirculation pump in the digester building.
- * Patched wasting valve vault for the gravity belt thickeners.
- * Debris removed from digested sludge overflow piping.
- * Replaced #13 return activated sludge pump adjustable frequency drive.
- * East aeration tanks pumped down to replace final clarifier gates.

Work Performed at Lift Stations

- * Preventative maintenance and grounds maintenance performed at all lift stations.
- * Wear rings on #1 pump replaced at 550.
- * Replaced battery backup at Ross Road.
- * Alternator replaced at Ashton Woods.
- * Calibrated nitronox chemical feed pumps for odor control at Prairie Oaks and Ross Road.

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Stormwater

STORMWATER MONTHLY NUMBERS

APRIL	2023	2022		2023	2022
Catch Basin Calls	5	1	Erosion Control Inspections	45	68
Sweeper Calls	11	2	Catch Basin Repaired	0	4
Sweeper Debris Removal (tons)	231	362.8	Catch Basins Cleaned	3	10
Stormwater Calls	4	4	Ft. of Storm Sewer Jet Clean	0	54

Work Performed

- * Pre-construction meetings attended for erosion control measures.
- * 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 18 City-owned properties.
- * Storm sewer preventative maintenance performed in the area of: New York St. to Williams/Kossuth St. and Sycamore St. to 4th St.
- * New catch basin structure and new storm line installed at Columbian Park.
- * Remove graffiti at Fairgrounds detention area.
- * Pick up trash out of bioswales to prep for mowing.
- * Patched 40' of storm pipe on McCarty Lane near VMP.
- * Assist Purdue Environmental and Ecological Engineering (EEE) class with prep and planting native flowers at Lafayette Academic Resource Academy.
- * Replace concrete washout at the plant and haul off debris from the tow path.
- * Stock pile stone, soil, and mulch at the plant.

Surveillance

Performed Surveillance

SIGNIFICANT: Primient, SIA, Cargill, and Tate North

GENERAL: none

Annual Industrial Pretreatment Inspections

Rea Magnet and Industrial Plating

GREASE TRAPS

Interior Inspection	37	Business Compliance Meeting	1
Exterior Inspection	87	Rough-in Inspection	1
Oil/Grit Separator Inspection	29	Under Slab Inspection	1
Plan Reviews	7	Final Inspection	0

Work Performed

- * Industrial meters read for billing purposes.
- * River sampling performed.
- * Durkees Overflow data downloaded for monthly report.
- * Quarterly Letter of Violation Summary sent to IDEM.
- * Personnel attended Annual Pretreatment Conference.
- * Local Limits sampling performed for industrial users.
- * Site visit conducted at Foodliner, ZF, and DANA.
- * River sampling performed for WREC Sampling Blitz.

Biosolids Land Application Program

- ◆ Biosolids hauled - 2.7 MG with average % solids of 5.05
- ◆ Volute press (landfilled) - 175.91 dry tons
- ◆ Soil sampling performed on permitted ground for the biosolids land application program.
- ◆ Field checks performed on permitted ground that biosolids were applied to.
- ◆ The monthly Land Application of Biosolids report was submitted to IDEM.

Sewers

SEWER MONTHLY NUMBERS

APRIL	2023	2022		2023	2022
Backup Calls	13	7	Manhole Frames Raised	0	2
City Blockages	0	0	Ft. of Sewer Jet Cleaned	3,406	0
Sanitary Calls	11	7	Ft. of Sewer Jet Cleaned—PM	44,135	0
Odor Calls	0	1	Total Manholes Cleaned	174	630
Tap Inspections	36	30	Ft. of Sewer Televised	500	32,137
Sewer Locates	1,994	1,387	Ft. of Sewer Root Cut	3,306	379

Work Performed

- * Preventative maintenance performed throughout the City.
- * Inspected Combined Sewer Overflow Structures.
- * Manhole checks performed in the Prairie Oaks subdivision area.
- * Clean catch basin areas.
- * Performed work on the spring root cut hot list.
- * Sewer repairs in the 2800 block of Kossuth Street.
- * Salt boxes and plows removed from trucks.
- * Removed a sewer rodding cable found in City sewer main at the 1300 block of Ridgeway Avenue.
- * Begin installing sanitary sewer at McCaw Park.