

## Director of Operations and Compliance Report

March 19, 2020

### Plant Loading, CSO Report, and Director's Notes

#### Plant Loading

Biochemical Oxygen Demand, 5-Day (Avg. 34220 lbs/day)	54 percent of design
Total Suspended Solids (Avg. 34220 lbs/day)	32 percent of design
Average Daily Flow (42.30 million gallons/day)	103 percent of design
Maximum Daily Flow (67.84 million gallons/day)	54 percent of design

	Permit Limits (avg/max)	Reported Values	Violations
CBOD <sub>5</sub> , mg/L	20/40	3/4	0
TSS, mg/L	25/45	4/5	0
NH <sub>3</sub> -N, mg/L	1.5/3.0	0.12/0.12	0
Fecal coliform per 100mL	400* (max)	N/A	0
Chlorine Residual, mg/L	0.05* (max)	N/A	0
Dissolved Oxygen, mg/L	6.0 (min)	8.75	0
pH, S.U.	6.0/9.0 (min/max)	7.79/8.07	0
Total Nickel, mg/L	0.015 (avg.)	0.012	0
Total Zinc, mg/L	0.075/0.416	0.015/0.031	0

\*Effluent disinfection is required May 1 through October 31.

#### CSO Report

Location	Events	Discharge (million gallons)	Estimated Total Duration of Discharges (hrs)
Oakland Avenue (Outfall 003)	2	0.57	4.9
Lincoln Park (Outfall 004)	0	0.0	0.0
McKinley Avenue (Outfall 007)	2	1.01	5.1
Seventh Ward (Outfall 008)	1	2.20	0.8

#### Director's Notes:

##### **Permit Issues:**

The communications with the Illinois EPA concerning a potential new permit is on-going. Although, currently there is nothing definitively new to report.

##### **Administrative Order on Consent:**

There has been no further communication from USEPA about the AOC. The SDD met all our deadlines outlined in the AOC so far and we have no more action items until we hear from the USEPA.

## **Award Received:**

The Illinois Water Environment Association (IWEA) is issuing the 2020 WEF Laboratory Excellence Award to Keith Richard the District's Laboratory Supervisor. The District is proud of Keith in receiving this award. It is no surprise to those of us that work with him that his knowledge and abilities are worthy of this award. Keith will be presented the award at the IWEA Banquet during the IWPC Conference in April.

## **Additional Topics:**

### Covid-19

The District is following the status of the recent Coronavirus issues. While there is always some inherent risk to a facility of this nature of illness it is not likely that the risk of this virus is any higher than any other as it is generally thought to be transmitted person-to-person and is not a waterborne disease.

## **Operations, Laboratory, and Pretreatment Activity Reports – February 2020**

### **Operations Activities:**

- 1) Operators assisted Bodine Drivers in loading trucks with digested sludge to be sent to ADM for seeding their digester(s).
- 2) The plant has been receiving grit in higher than normal volumes of late and the material is arriving in slugs. Coupled with this is an additional issue that the incoming grit load is tending more toward the east headworks than the west; the facilities on the east units are inundated while those on the west are lightly loaded. Operators have been working on various gate/flow configurations etc. to resolve these concerns.
- 3) Operators worked with Maintenance staff on #4 Heat exchanger which was taken down for repair. After the work was completed, they placed the unit back into service.
- 4) Operators worked to better control sludge blankets on the final clarifiers as a result of high flows this month.
- 5) Tim Gorden attended the Utility Management Conference in Anaheim CA.
- 6) Steve Smith, Brent Deardorff, Donald Neece, and Tyson Royer attended the IRWA Operator's Conference in Effingham IL during February.
- 7) The Operations department staff performed 199 Proactive Maintenance (PM) tasks for the month of February 2020 which required 95 man-hours to complete (equivalent to .55 Full Time Employees (FTE)).

### **Laboratory Activities:**

#### **Routine:**

A total of 1,758 analyses were performed in the laboratory during the month of February 2020.

Monitoring of treatment plant, industrial users, and receiving stream samples for compliance purposes and process monitoring continued. Laboratory personnel continued to perform additional background nutrient monitoring to help fully characterize the nutrient loading on the plant.

**Non-Routine:**

- 1) The quarterly NPDES sampling of the influent, effluent, and sludge to Wyckles was conducted during the second week of February 2020.
- 2) The river study with Eastern Illinois University continued in February 2020. Water samples from all six field sites were analyzed for nickel content. The nickel levels this month were less than the reporting limit at all sites except site 9, which was just above the reporting limit.

**Pretreatment Activities:****General Activities:**

- 1) Pretreatment personnel monitored seven industrial users and performed two industrial user inspections during February 2020.
- 2) There are no updates to the AOC this month.
- 3) Annual Reports have arrived from most of our industrial users. We are still waiting on reports from **DMH** and **Decatur Foundry**. They are going to get the reports sent ASAP.
- 4) Matt Nihiser met with representatives from **Advanced Disposal Landfill** to discuss the feasibility of hauling material from the South Sludge Lagoon to the Decatur Landfill. The landfill representatives took a sample of the material for analysis.
- 5) A request to modify Caterpillar's Permit #125 was received. Due to the increase in demand for the tractors manufactured at the Decatur Plant, Cat would like an increase in their discharge flow limits.
- 6) A request to modify **voestalpine Nortrak's** permit #340 was received and is being reviewed. **Nortrak** is requesting reduced monitoring for non-categorical pollutants that are not present in their effluent. Further sampling is required before I can make a recommendation.
- 7) A permit application was received from **H&M Trucking**.

**Pretreatment Ordinance - Verbal Notices:**

- 1) A Verbal Notice was issued to **St Mary's Hospital** on February 11, 2020 because they discharged wastewater to the SDD with a pH below their lower pH limit.
- 2) A Verbal Notice was issued to **Tate and Lyle** on February 17, 2020 because they discharged wastewater to the SDD with a pH below 6.0.
- 3) A Verbal Notice was issued to **Prairie Farms Dairy** on February 24, 2020 because they discharged wastewater to the SDD that exceeded their total Fats, Oils and Grease limit. The issue was attributed to a failure to follow proper cleaning procedures.

**Pretreatment Ordinance - Warning Notices:**

No Warning Notices were issued during February 2020.

**Pretreatment Ordinance - Notices of Violation (NOV):**

No Notices of Violation were issued during February 2020.

**Pretreatment Ordinance - Executive Orders:**

No Executive Orders were issued during February 2020.

**Pretreatment Ordinance - Penalty Assessments:**

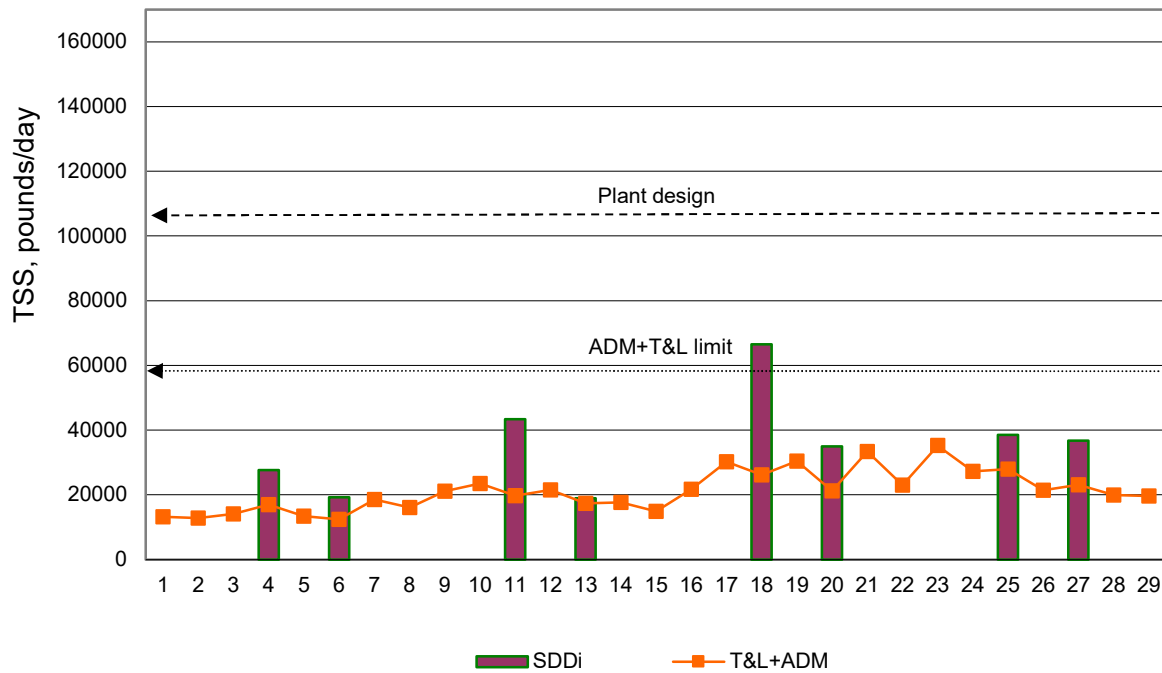
The following industrial penalties were assessed for February 2020:

- 1) **Tate and Lyle** **\$167,000**
- 2) **Prairie Farms** **\$1,000**

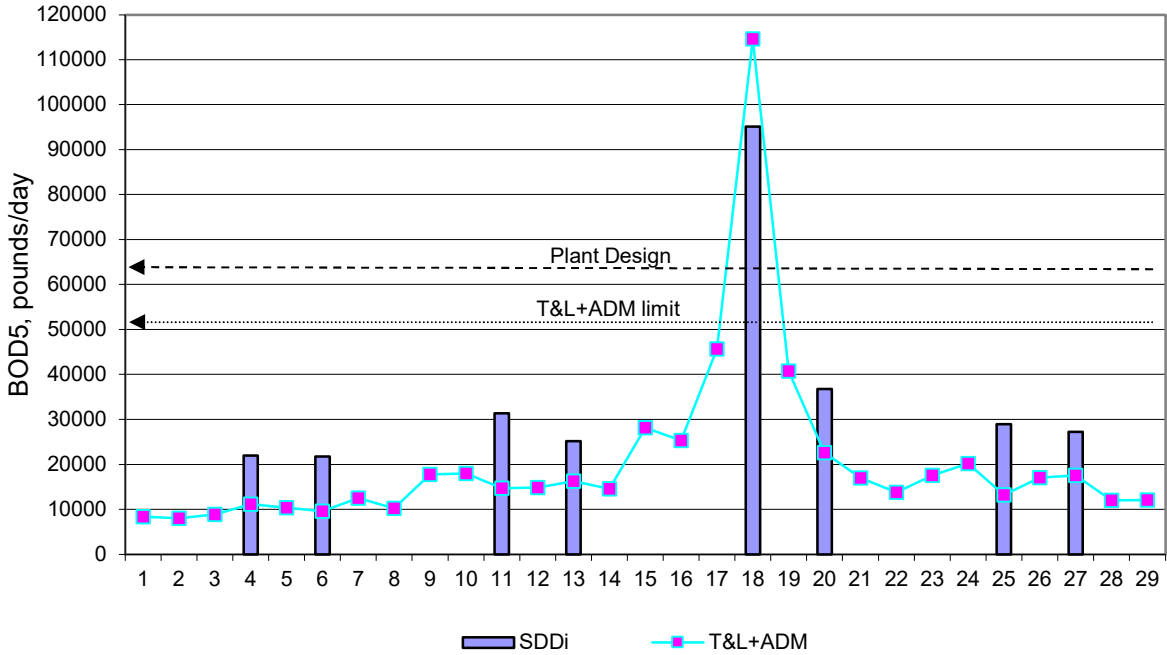
**Note: Tate and Lyle** had a loss that resulted in 10-Day Moving Average violations that continued into March. We will be issuing a Warning Notice to them in March for the February/March excursion.

**Plant Operating Graphs:**

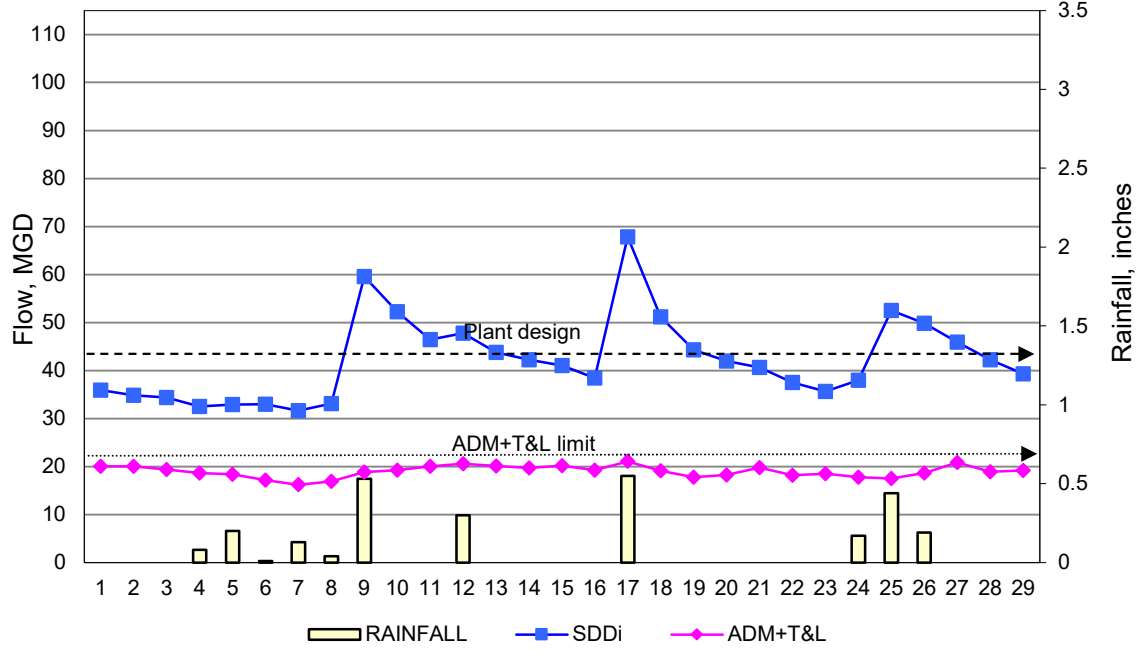
**TSS Comparison: SDD Inf T&L+ADM Discharges**



**BOD Comparison: BOD Inf vs. T&L + ADM Discharges**



**Flow Comparison: SDD vs. ADM + T&L Discharges and Rainfall**



**Plant Efficiency Graphs:**

