

Director of Operations and Compliance Report

May 26, 2021

Plant Loading, CSO Report, and Director's Notes

Plant Effluent Report

Biochemical Oxygen Demand, 5-Day (Avg. 32860 lbs/day)	52 percent of design
Total Suspended Solids (Avg. 40316 lbs/day)	37 percent of design
Average Daily Flow (33.11 million gallons/day)	81 percent of design
Maximum Daily Flow (47.74 million gallons/day)	38 percent of design

<u>Parameter</u>	<u>Report Frequency</u>	<u>Permit Limits</u>	<u>Reported Values</u>	<u>Violations</u>
CBOD ₅ , mg/L	Mo. Avg/Wk. Avg	20/40	2/2	0
TSS, mg/L	Mo. Avg/Wk. Avg	25/45	2/3	0
NH ₃ -N, mg/L	Wk. Avg/Daily Max	1.5/3.0	0.12/0.12	0
DO, mg/L	Daily Min	6.0	7.86	0
pH, S.U.	Daily Min/Max	6.0/9.0	8.09/8.39	0
Total Nickel, mg/L	Mo. Avg	0.015	0.014	0
Total Zinc, mg/L	Mo. Avg	0.075/0.416	0.014/0.017	0
CL ₂ Residual, mg/L	Daily Max	0.05*	0.011	0
Fecal Coliform CFU/100mL	Daily Max	400*	N/A	0

*Effluent disinfection is required May 1 through October 31.

CSO Report

Location	Events	Est. Total Duration of Discharges (hrs.)	Discharge (million gallons)
Oakland Avenue (Outfall 003)	1	2.5	0.66
Lincoln Park (Outfall 004)	0	0.0	0.0
McKinley Avenue (Outfall 007)	1	3.7	1.63
Seventh Ward (Outfall 008)	1	3.2	1.15

Director's Notes:

NPDES Permit:

The District in coordination with HeplerBroom is still in discussions with the IEPA on the particulars of the upcoming new permit. A letter of response to the Draft Permit was issued to IEPA on May 21. As of the writing of this report there was no new permit issued.

Wyckles Facility East Lagoon Project:

J. Oros Environmental Inc. is moving on the clean-up of the East Wyckles Lagoon and report the remainder of approximately 1100cu.yds. of material to be removed. The lagoon is ready for Christy-Foltz to begin the repairs.

Operations, Laboratory, and Pretreatment Activity Reports – April/May 2021

Operations Activities:

Normal operational activities were conducted as prescribed by standard procedures or in response to conditions within the plant related to the new measures being employed due to Covid-19.

- 1) The Disinfection system upgrades, and repairs necessary to prepare for the new disinfection season have been completed. Operators have been leak checking all piping and pumps and going over the new piping in the Ammonia and Chlorine buildings.
- 2) The Operators have pumped out digester units #2 and #3 to prepare for the lid replacement and new digester cladding project(s). This project is currently under way and has not caused any significant difficulties in the operation of the digestion system(s) so far.
- 3) Solids in the system from the T&L release are still higher than normal. The operators have been required to utilize all the thickeners to keep up with the increased wasting.
- 4) The Operators have been making incremental adjustments to the rotating drum thickeners to improve operational efficiency, reduce the polymer usage, and reduce the runtimes/cycles of the Thickened Pumps.
- 5) Operations staff have been attending webinars presented in association with the IWPC 2021 teleconference. They will also have available to them any webinars that they missed live will still allow them to acquire CEUs towards their certification renewal as long as they view them within 60 days from the end of the conference.

Laboratory Activities:

Routine:

A total of 1,792 analyses were performed in the laboratory during the month of April 2021.

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) Extra process control testing was performed in the laboratory throughout the month of April as part of the Wyckle's Lagoon cleaning project to monitor the plant loading coming from the Wyckle's supernatant.
- 2) The quarterly sampling of the groundwater monitoring wells was conducted at the South Sludge Lagoons and Wyckles Lagoons.
- 3) Rayce Frey formerly the District's Sampler Tech has accepted an offer of transfer to the Laboratory as a Lab Tech. Rayce has been with the District for three years and previously was a Graduate of Millikin University in Chemistry.
- 4) Keith Richard attended the virtual quarterly meeting of the Heart of the Sangamon River Ecosystem Partnership on April 8, 2021. The partnership is a consortium of local government

agencies and non-government organizations that are working together to ensure the continued well-being of the Upper Sangamon River Watershed

- 5) Keith Richard attended the Illinois Wastewater Professionals Conference (IWPC) from April 19-30. The conference was completely virtual this year and was spread out over two weeks instead of the normal three days.
- 6) Keith Richard served as a poster judge for the Millikin University "Celebrations of Scholarship and Poster Symposium" on April 23, 2021. The poster symposium was an opportunity for students to present the research projects they had worked on during the school year. The poster symposium was virtual again this year with the students giving live-stream presentations of their research projects for the judges.

Pretreatment Activities:

General Activities:

- 1) Pretreatment personnel monitored eleven commercial and industrial users (IU) during April 2021 and conducted three industrial site inspections.
- 2) The SDD continues to work on the corrections to our draft ordinance. USEPA has been helpful in answering all the questions we have had about their comments.
- 3) There are no updates to the USEPA desk audit.
- 4) The SDD received a permit application from **Decatur Plating**.
- 5) The SDD issued discharge permits to **KAG Specialty Products** and a wastewater hauler discharge permit to **Alpha Drains, LLC**.
- 6) The Pretreatment Annual Report was sent to USEPA and IEPA ahead of schedule.
- 7) The SDD calculated significant non-compliance (SNC) for the period of October 2020 to March 2021. **Tate and Lyle** were found to be in SNC for causing the SDD to violate our NPDES permit.
- 8) Matt Nihiser met with representatives from Mueller Company at the new Mueller Foundry site on Jasper Street to discuss issuing a new wastewater discharge permit for that site.

Pretreatment Ordinance - Verbal Notices:

- 1) A Verbal Notice was issued to **Prairie Farms Dairy** on April 8, 2021 for discharging wastewater above their upper pH limit.
- 2) A Verbal Notice was issued to **Prairie Farms Dairy** on April 21, 2021 for discharging wastewater that contained total FOG above their limit. This violation and the pH violation above were related to cleanup that was being performed during the time the sample was grabbed. Procedures have been reviewed with their employees that should help prevent pH and FOG violations due to sewer losses.
- 3) A Verbal Notice was issued to **Prairie Farms Dairy** on April 30, 2021 for discharging wastewater that violated their daily maximum BOD limit. The high BOD was caused by an accidental discharge of product mix to sewer due to improper valve turning/hose hookup. The floor drain near the mix tank is now required to be always covered, not just when hoses are being hooked up.

Pretreatment Ordinance - Warning Notices:

The SDD issued Warning Notice 21-004 to **Tate and Lyle** for pH, BOD and H₂S violations. The required report on the violations has not yet been received by the SDD.

Pretreatment Ordinance - Notices of Violation (NOV):

No Notices of Violation were issued during April 2021.

Pretreatment Ordinance - Executive Orders:

No Executive Orders were issued during April 2021.

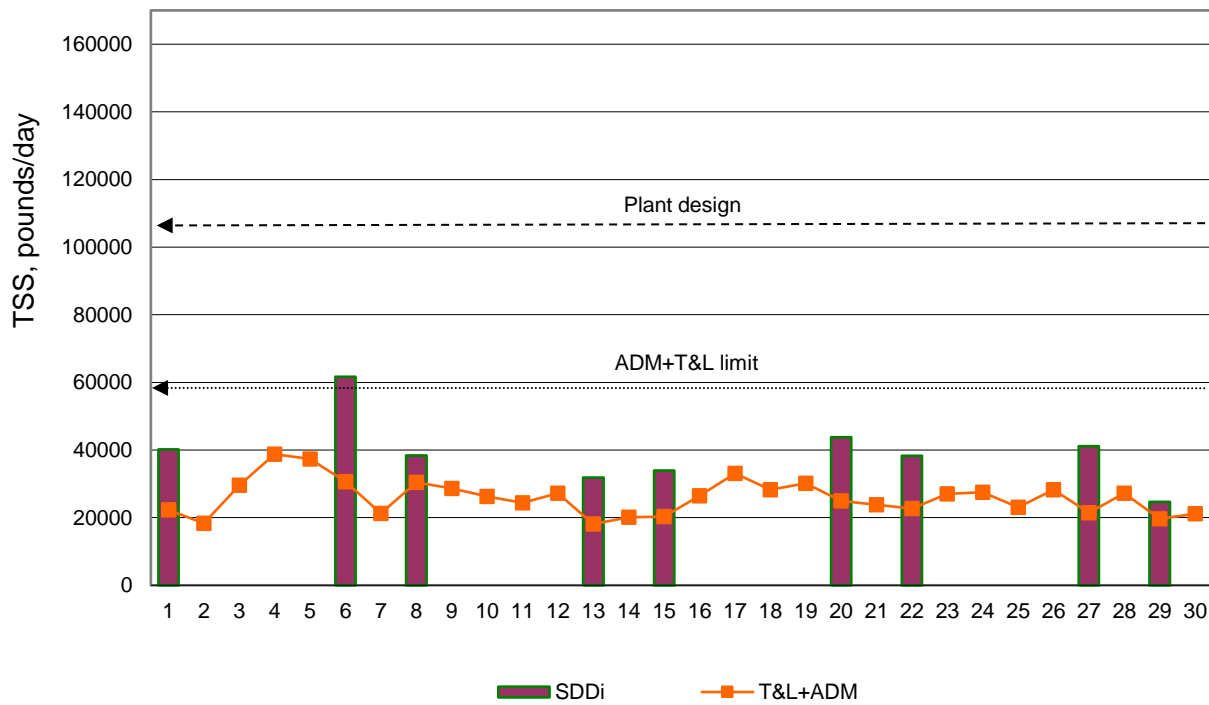
Pretreatment Ordinance - Penalty Assessments:

The following industrial penalties were assessed for April 2021:

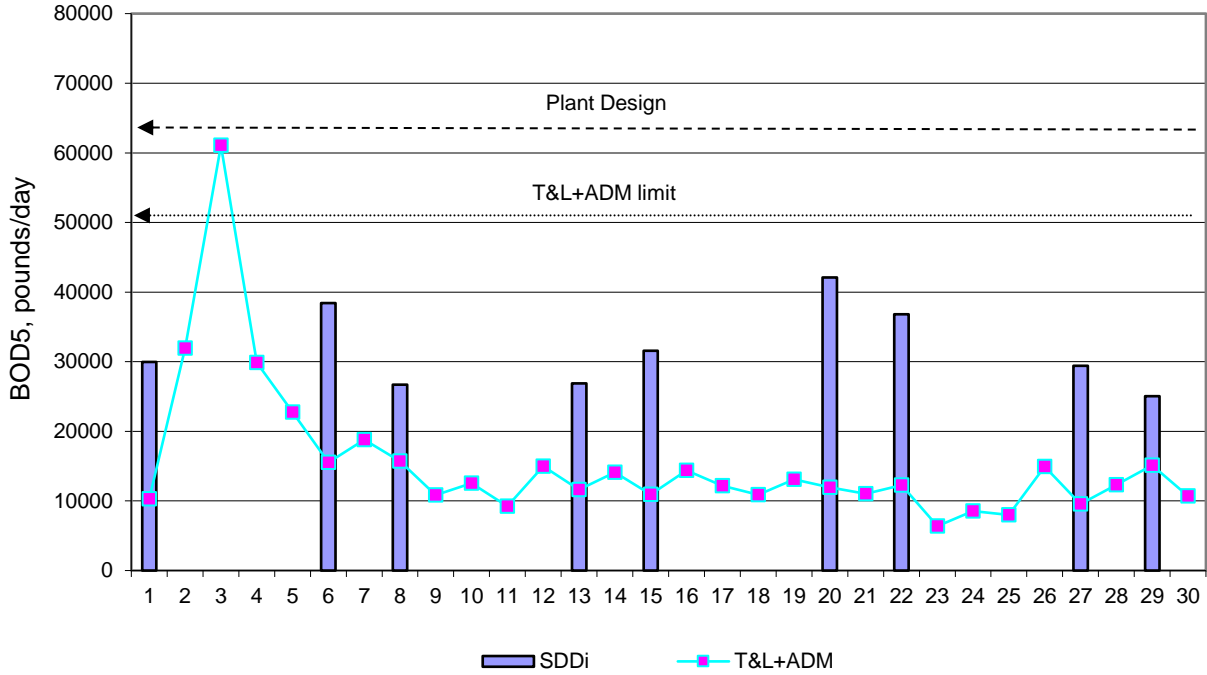
- 1) **Tate and Lyle** **\$329,500**
- 2) **Prairie Farms Dairy** **\$13,500**

Plant Operating Graphs:

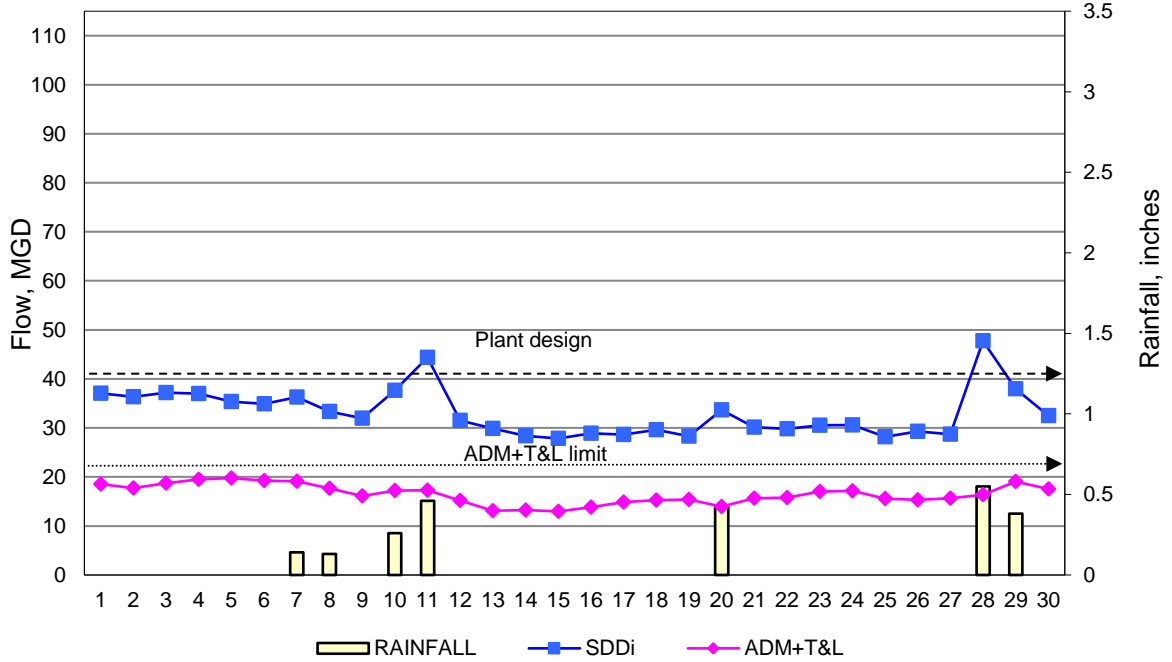
TSS Comparison: SDD Inf T&L+ADM Discharges



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



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



Plant Efficiency Graphs:

