

## Director of Operations and Compliance Report

July 21, 2021

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

#### Plant Influent Report

Biochemical Oxygen Demand, 5-Day (Avg. 30975 lbs/day)	49 percent of design
Total Suspended Solids (Avg. 55135 lbs/day)	51 percent of design
Average Daily Flow (37.14 million gallons/day)	91 percent of design
Maximum Daily Flow (82.73 million gallons/day)	66 percent of design

#### Plant Effluent Report

<u>Parameter</u>	<u>Report Frequency</u>	<u>Permit Limits</u>	<u>Reported Values</u>	<u>Violations</u>
CBOD <sub>5</sub> , mg/L	Mo. Avg/Wk. Avg	20/40	3/4	0
TSS, mg/L	Mo. Avg/Wk. Avg	25/45	3/5	0
NH <sub>3</sub> -N, mg/L	Wk. Avg/Daily Max	1.5/3.0	0.35/0.49	0
DO, mg/L	Daily Min	6.0	7.37	0
pH, S.U.	Daily Min/Max	6.0/9.0	7.74/8.32	0
Total Nickel, mg/L	Mo. Avg	0.015	0.024	1
Total Zinc, mg/L	Mo. Avg	0.075/0.416	0.014/0.027	0
CL <sub>2</sub> Residual, mg/L	Daily Max	0.05*	0.011	0
Fecal Coliform CFU/100mL	Daily Max	400*	320	0

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

#### CSO Report

<u>Location</u>	<u>Events</u>	<u>Est. Total Duration of Discharges (hrs.)</u>	<u>Discharge (million gallons)</u>
Oakland Avenue (Outfall 003)	2	32.8	15.9
Lincoln Park (Outfall 004)	2	23.8	33.7
McKinley Avenue (Outfall 007)	3	34.8	15.45
Seventh Ward (Outfall 008)	1	3.5	13.65

#### Director's Notes:

##### **NPDES Permit:**

The District and the IEPA as of the writing of this report are still discussing new permit language and requirements.

District Staff is beginning to work on on schedules, data collection, etc. to enable compliance with the many various report deadlines and other requirements that will be included in the forthcoming Permit.

### **ADM Pretreatment Permit Violation:**

A report of an ADM discharge violation can be found below in the Pretreatment Section of this report. The violation was related to nickel discharges and caused a pass-through exceedance event with the district's discharge permit. During a portion of the days of the event the discharges from our effluent were above even the limits set by the new Site-Specific Rule.

### **Wyckles Facility East Lagoon Project:**

Christy-Foltz (CF) continues work on the discharge chutes on the East Lagoon. Two of the three have been completed to-date and the third should be completed as soon as the weather breaks and permits them to safely recommence operations.

J. Oros Environmental Inc. is still holding off on the remainder of their cleaning work to allow for CF to complete the repairs on the chutes.

### **Operations, Laboratory, and Pretreatment Activity Reports – June/July 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 is on-line and operating well. There were no exceedances during the month of June, and none as of the writing of this report. The operators maintain vigilance in monitoring the nitrite, dissolved oxygen, chloramination and dechloramination chemical feeds to ensure effective treatment and compliance with the permit in as efficient manner as is practicable.
- 2) The Operators continue to work with Christy-Foltz staff to facilitate the construction project at the anaerobic digester facility.
- 3) Drum thickener operations remains heavier than normal, but we are not needing to run all three drums at this time, so this condition seems to be improving over time.
- 4) Jamey Oliver has recently implemented, and the Operators are utilizing a new automated cleaning mode for the West Headworks grit system. There is some refining of controls required. When opportunity presents itself, this functionality is also planned for the East Headworks systems.
- 5) Operations has recently reverted to the utilization of the 210 sludge wetwell for wasting primary sludge to the digesters to improve and refine those systems' operations, performance, and data collection capabilities.
- 6) Darrick Hulva has been promoted from OIT to the Operator position and is currently working his normal assigned shifts.
- 7) David Collard attended the IAWA Technical Committee Meeting at Starved Rock State Park in Oglesby, IL on July 9, 2021. The meeting consisted of two presentations on topics related to the Water Agencies concerns as well as a business meeting that included reports from the various sub-committees that exists in the IAWA.
- 8) Operations staff continue to actively address PMs as time, workload, and staff levels allow.

## **Laboratory Activities:**

### **Routine:**

A total of 1,720 analyses were performed in the laboratory during the month of June 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) The SDD lab started participating in a "COVID-19 in wastewater" study funded by the Illinois Department of Public Health. The study is being coordinated by the University of Illinois and the samples are being sent to a lab called 120 Water for detection of the SARS-CoV-2 virus. The SDD is one of ten facilities in Illinois that were selected for a preliminary 16-week trial study before a larger statewide study is started. We are shipping a sample of raw influent from our 24-hour composite sample every Tuesday and Thursday for the duration of the 16-week trial study.
- 2) Keith Richard attended the virtual meeting of the Illinois Nutrient Monitoring Council on June 10, 2021. The council is comprised of scientists from local, state, and federal water agencies and from the University of Illinois. The goal of the council is to fully characterize the nutrient "loss" from the state of Illinois into the Mississippi River watershed.
- 3) Keith Richard attended the Illinois Water Environment Association (IWEA) Executive Board and Committee Chair Meeting that was held virtually on June 25, 2021. The group meets quarterly to discuss current and upcoming activities of the IWEA and its committees. Keith continues to serve as the Chair of the IWEA Laboratory Committee.

## **Pretreatment Activities:**

### **General Activities:**

- 1) Pretreatment personnel monitored five commercial and industrial users (IU) during June 2021 and conducted six industrial site inspections.
- 2) USEPA has reviewed our draft ordinance, legal authority statement and local limits update and issued a tentative approval. We are preparing to public notice the documents. The public notice will run for 30 days, and if a public meeting is requested, we will hold one. In addition to publishing the notice in the Decatur Herald and Review, we will also notify State and Federal Fish and Wildlife agencies, IEPA, and other designated 208 planning agencies.
- 3) There are no updates to the USEPA desk audit.
- 4) ADM has submitted responses to the District regarding existing Notices as required by their Permit. Resolution of these matters are on-going, and the next step will be a meeting between ADM and District Staff which has been scheduled for July, 14 2021.
- 5) Matt Nihiser and Dave Collard completed the annual Stormwater Pollution Prevention Plan site audit in June. Only two minor corrections were required this year, and no major issues were found.

### **Pretreatment Ordinance - Verbal Notices:**

- 1) A Verbal Notice was issued to **H&M Trucking** on June 7, 2021, for failing to submit their self-monitoring report on time. H&M submitted the report that day.

- 2) A Verbal Notice was issued to **Stripmasters** on June 7, 2021, for failing to submit their self-monitoring report on time. Stripmasters has not yet submitted their report, which automatically puts them into Significant Non-Compliance after 30 days.
- 3) A Verbal Notice was issued to **Tate and Lyle** on June 29, 2021, for exceeding their wet-weather flow limit. The large volume of rainfall the area experienced at the end of June caused Tate and Lyle to exceed their flow limit.

**Pretreatment Ordinance - Warning Notices:**

No Warning Notices were issued during June 2021.

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

The SDD issued NOV 21-001 to **ADM** on June 16, 2021, for violating their daily maximum and monthly average nickel limit in May 2021. This NOV is related to the Corn Plant Ion Exchange Dirty Backwash Tank loss experienced in early May and includes a compliance meeting in mid-July.

**Pretreatment Ordinance - Executive Orders:**

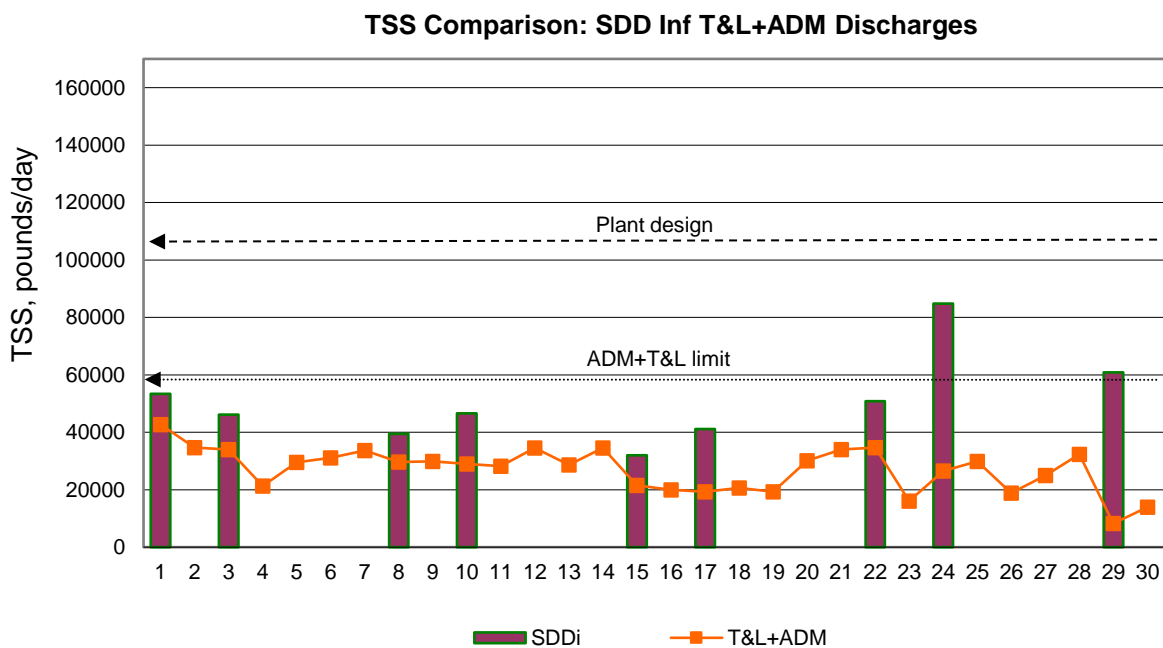
No Executive Orders were issued during June 2021.

**Pretreatment Ordinance - Penalty Assessments:**

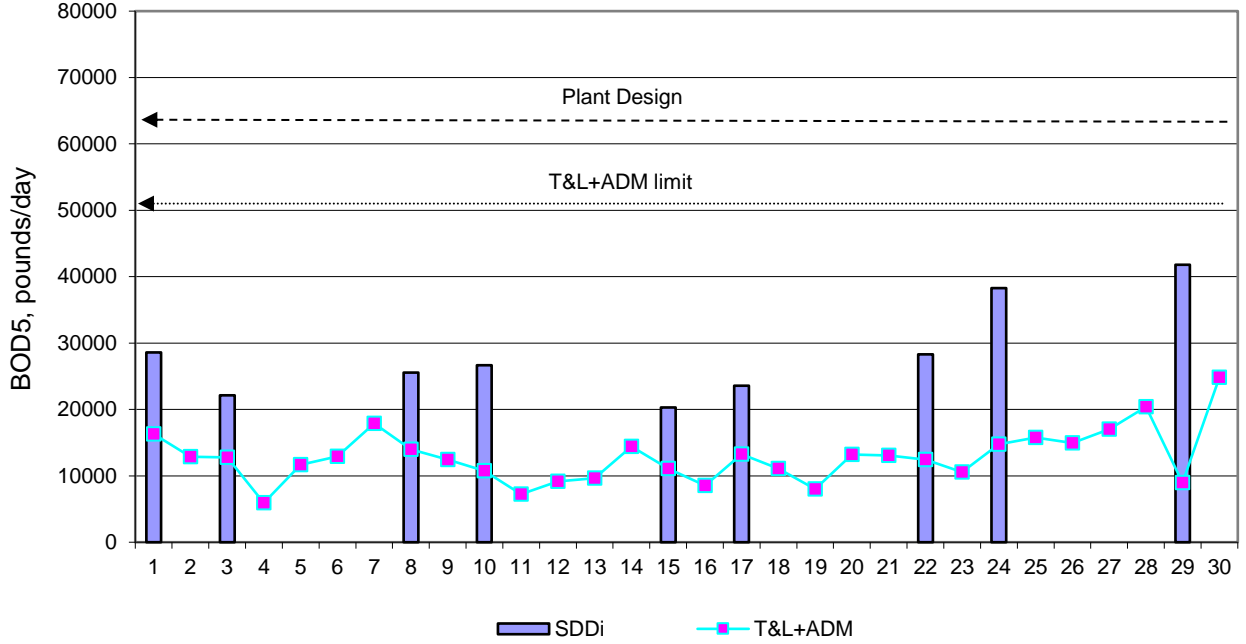
The following industrial penalties were assessed for June 2021:

- 1) **ADM** **\$1,000**
- 2) **Tate & Lyle** **\$1,000**

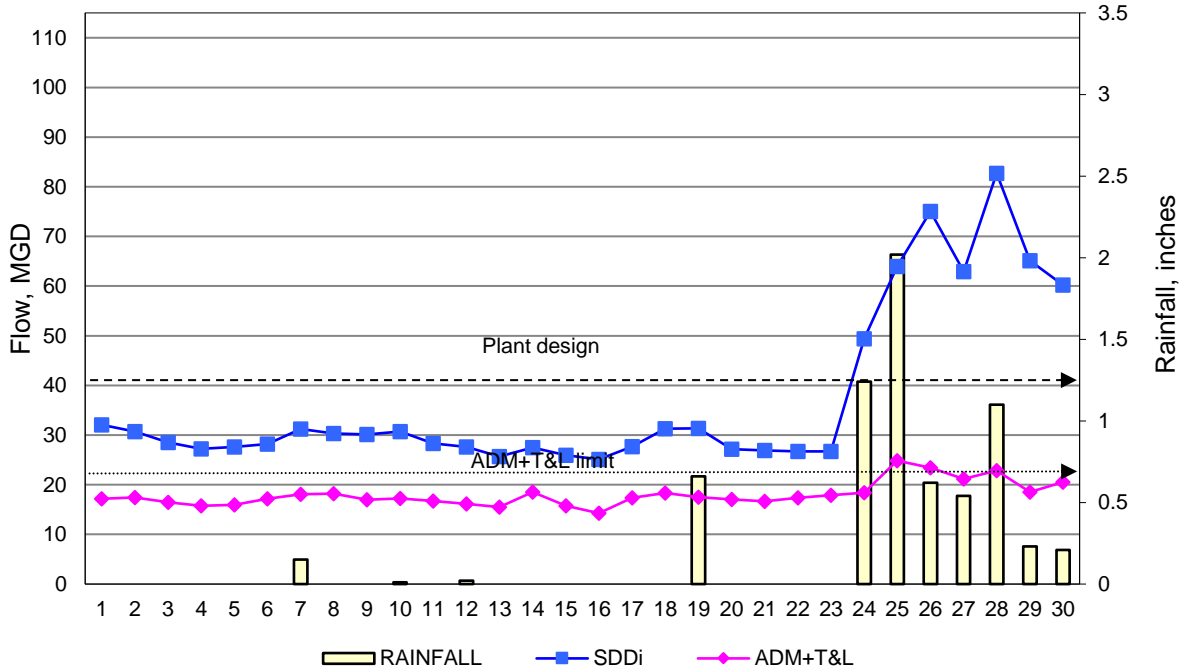
**Plant Operating Graphs:**



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



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



**Plant Efficiency Graphs:**

