Director of Compliance and Innovation Report

November 19, 2025

Plant Loading, CSO Report, and Director's Notes

Plant Influent Report:

Biochemical Oxygen Demand, 5-Day (Avg. 25751 lbs/day)

Total Suspended Solids (Avg. 33024 lbs/day)

Average Daily Flow (23.57 million gallons/day)

Maximum Daily Flow (42.56 million gallons/day)

40 percent of design 30 percent of design 31 percent of design 32 percent of design 33 percent of design 34 percent of design 35 percent of design 36 percent of design 36 percent of design 36 percent of design 37 percent of design 38 percent of design 39 percent of design 39

Plant Influent Total Monthly Flow (million gallons) for September 689.06 Estimated Unbilled Total Monthly Flow (million gallons) 47.94 Total Monthly Precipitation (inches) 1.08

Plant Effluent Report:

<u>Parameter</u>	Report Frequency	<u>Permit</u>	Reported	<u>Violations</u>
		<u>Limits</u>	<u>Values</u>	
CDOD/I	NA - /\A/I - A	20/40	2/2	0
CBOD ₅ , mg/L	Mo./Wk. Avg	20/40	2/2	0
TSS, mg/L	Mo./Wk. Avg	25/45	3/5	0
NH ₃ -N, mg/L	Mo. Avg/Daily Max	1.5/3.0	0.44/0.53	0
DO, mg/L	Mo. Avg/Wk. Avg/Daily Min	6.0/4.5/4.0	7.19/6.82/6.73	0
pH, S.U.	Daily Min/Max	6.0/9.0	7.81/8.23	0
Total Nickel, mg/L	Mo. Avg	0.0381	0.019	0
Cl ₂ Residual, mg/L	Daily Max	0.05	< 0.011	0
Fecal Coliform	Daily Max	400	140	0
CFU/100mL				

CSO Report:

Location	Events	Est. Total Duration of Discharges (hrs.)	Discharge (million gallons)
Oakland Avenue (Outfall 003)	1	3.82	1.56
Lincoln Park (Outfall 004)	1	0.49	0.3
McKinley Avenue (Outfall 007)	1	4.3	2.42
Seventh Ward (Outfall 008)	1	4.2	8.29

Director's Notes:

Land Application Program:

Metro-Ag will complete the land application of the District's biosolids at the end of the week of November 10, 2025. This year's application covered 13 local farm fields, encompassing approximately 1,338 acres, with a total of about 30 million gallons applied over just more than a month. The operation proceeded very smoothly, with only one day of downtime due to weather.

Chemical Usage During the 2025 Disinfection Season:

31.72

31.12

		EFF	264	NH3	CL2			
Chemicals	INF TOT	TOT	TOT	TOT	TOT	BIS TOT	AVG	
2025	MGD	MGD	MGD	GPD	GPD	GPD	COST/d	Cost/Mo
May	33.56	35.60	36.32	154.95	893.44	415.86	\$2,855.08	\$88,507.36
June	32.32	34.91	35.56	155.91	917.41	398.74	\$2,862.44	\$85,873.25
July	32.57	35.15	32.78	181.13	1065.67	492.16	\$3,389.08	\$105,061.60
Aug	28.64	31.16	30.66	187.52	1114.83	418.78	\$3,329.10	\$103,202.12
Sep	22.96	26.53	26.94	158.31	905.10	358.96	\$2,757.55	\$82,726.47
Oct	23.57	26.98	24.49	188.70	1109.31	347.83	\$3,165.00	\$98,115.15
								\$93,914.32

Disinfection Season:

Avg

28.94

The District operations staff successfully completed the entire disinfection season without a single exceedance. The team has developed a stronger understanding of the challenges that can arise in the disinfection process, particularly those related to industrial user impacts. As a result, they have become highly proactive in recognizing early indicators of potential issues entering the plant that could affect operations. Operators also maintained heightened vigilance in monitoring dissolved oxygen (DO) concentrations in the aeration tanks, adjusting airflow as necessary to address elevated ammonia levels, increased BOD loading, and nitrite fluctuations associated with industrial influent.

171.09 1000.96 405.39

\$563,485.94 Sum

Through careful observation, timely chemical adjustments, and process refinements, the staff achieved an excellent disinfection season—an accomplishment also reflected in reduced operational costs.

Operations, Laboratory, and Pretreatment Activity Reports – October/November 2025

Operations Activities Summary:

Routine operational activities were carried out in accordance with established procedures and in response to plant conditions. These activities encompassed equipment operation, monitoring and adjustment, process control testing, recordkeeping, and interdepartmental coordination to ensure optimal plant performance.

1) Digester Pumping Alternatives-

Operations and Maintenance personnel have been evaluating alternative methods for transferring material from Primary Digester #2 to the Secondary Digester due to recurring pump blockages.

2) Preventive Maintenance (PM)-

Operations staff continue to address preventive maintenance tasks as permitted by current time constraints, workload demands, and staffing levels.

3) Standard Operating Procedures (SOPs)-

Efforts to develop and refine SOPs are ongoing, with staff actively engaged in documentation and procedural improvements.

4) Blower Usage-

Blower demand remains elevated due to sustained industrial loading and increased effluent ammonia concentrations. In response, the Hoffman blower has been activated to support operational requirements.

5) Disinfection Process-

Seasonal disinfection activities have been successfully completed, and winterization of the system is currently underway. All team members are to be commended for their dedication and contributions to a successful season.

6) Land Application Preparation-

Operators continue to actively manage the east lagoon, performing mixing operations as needed to ensure readiness for land application.

Laboratory Activities:

Routine:

A total of 2,265 analyses were performed in the laboratory during the month of October 2025.

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 laboratory continued to send samples of raw influent weekly throughout October 2025 for the Illinois Wastewater Surveillance System. Levels of COVID have remained low while influenza A, influenza B, and RSV all remained at undetectable levels in the recent samples.
- 2) The SDD laboratory analyzed one stormwater sample during October 2025 for the Lake Decatur Watershed monitoring study. The SDD is providing in-kind laboratory analysis of samples collected at the study's monitoring sites after significant storm events.
- 3) Special sampling was conducted of the secondary plant effluent at the 267 junction structure throughout the month of October 2025. The samples were analyzed for color, COD, nitrite, and total suspended solids to gather data for estimating the necessary dosing if ozone was to be used for disinfection of the plant effluent in the future.
- 4) Keith Richard was a speaker at the Central Region annual conference of the Illinois Association of Water Pollution Control Operators (IAWPCO) in Urbana on October 15, 2025. His presentation was titled "Accurate Lab Data, Accurate Operations" and focused on obtaining quality lab data by using proper lab procedures to help plant operators run their plants more effectively.

Pretreatment Activities:

Pretreatment - General Activities:

- 1) Pretreatment personnel monitored 7 commercial and industrial users (IU) during October 2025. There were no industrial site inspections completed.
- 2) There were no permits issued in October 2025.
- 3) Local Limits sampling occurred in October, with sampling occurring at both St. Louis Bridge and inside the plant. All collection system sampling has been completed, which will allow us to calculate

the domestic background averages of the collection system. This will be used in conjunction with the removal efficiency sampling data to determine the maximum allowable headworks loading (MAHL) and maximum allowable industrial loading (MAIL). There are two instances left of removal efficiency sampling, which will occur during the first week of December.

4) Sampling for **Tillamook** continued in October. They failed two of their four TSS samples, which led them to a monthly average TSS violation, and they also failed on their FOG sample on 10/6. There was only one slug attributed to **Tillamook** on October 15th. Work continues at the site as they prepare to install a waste tank and a DAF to be able to better detect and control slug discharges to the SDD.

Pretreatment Ordinance - Verbal Notices:

SDD issued a total of 9 Verbal Notices to ADM, Tillamook, and Primient in October 2025:

- Primient (2 Violations):
 - Low pH (Point C): 10/14/2025Sulfide Daily Max: 10/29/2025
- Tillamook (5 Violations):
 - o TSS Daily Max (2): 10/29/2025 and 10/30/2025
 - o TSS Monthly Average
 - Slug load on 10/15/2025
 - o FOG-T Daily Max: 10/6/2025
- ADM (1 Violation)
- TSS Daily Max: 10/24/2025
 St. Mary's Hospital (1 violation)
 TSS Daily Max: 10/6/2025

Pretreatment Ordinance - Warning Notices (WN):

There were no WN's issued during October 2025.

Pretreatment Ordinance - Notices of Violation (NOV):

There were no NOV's issued during October 2025.

Pretreatment Ordinance - Executive Orders (EO):

There were no EO's issued during October 2025.

Pretreatment Ordinance - Penalty Assessments:

The following industrial penalties were assessed for October 2025.

- **Primient -** \$2,000
- Tillamook \$17,000
- **ADM** \$1,000

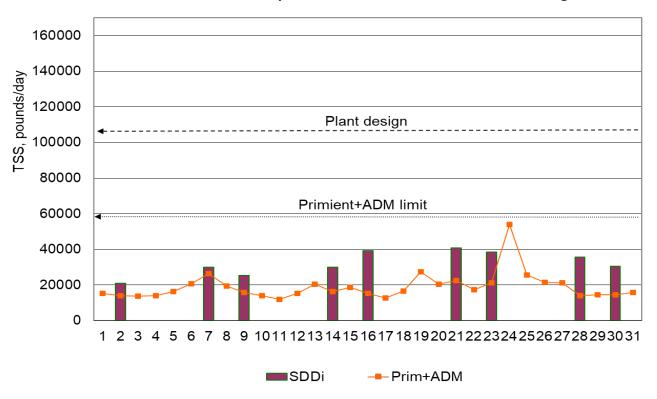
Nutrient Program Report:

NARP/Integrated Planning:

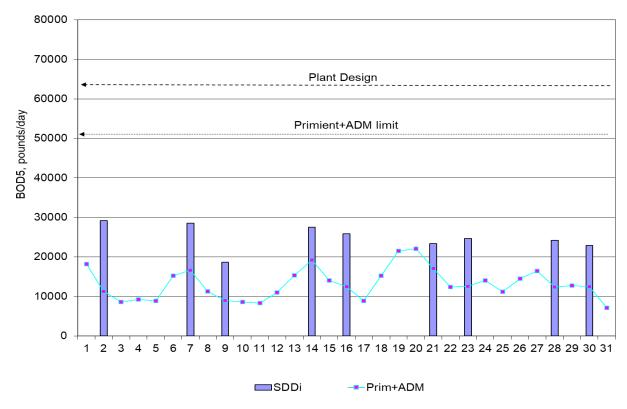
The District is still awaiting the City's approval of the newest revised draft of the Memorandum of Understanding (MOU). Once confirmation is received, the revised draft will be distributed to stakeholders for review by their respective legal teams. Following that, a meeting will be scheduled to discuss and finalize the work plan schedule.

Plant Operating Graphs:

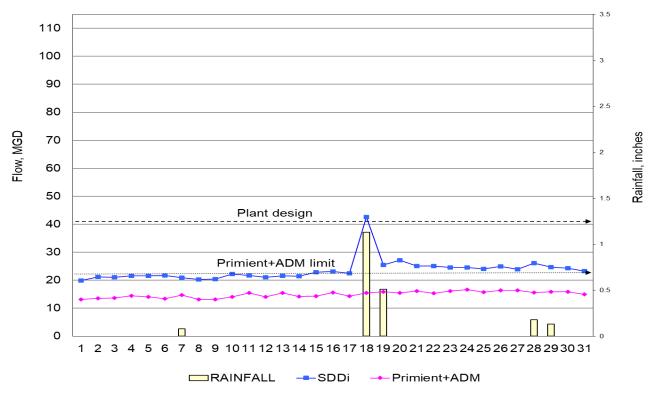
TSS Comparison: SDD Inf Primient+ADM Discharges



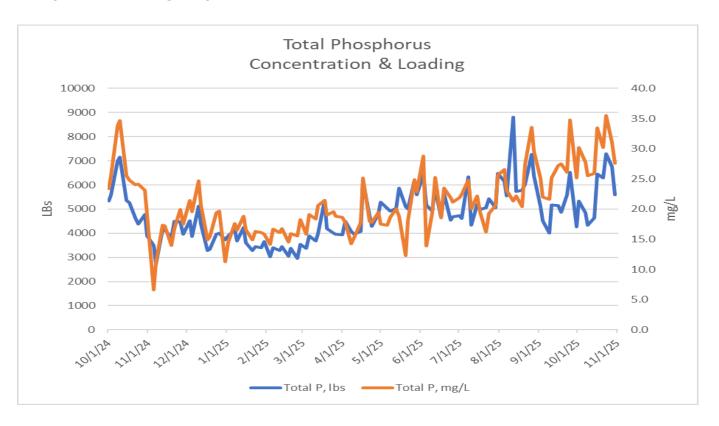
BOD Comparison: BOD Inf vs. Primient + ADM Discharges





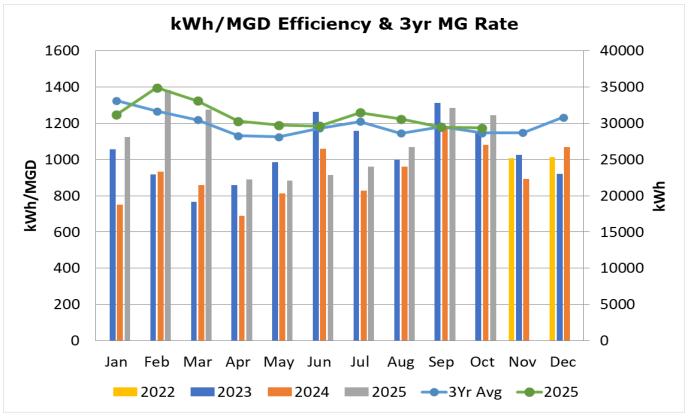


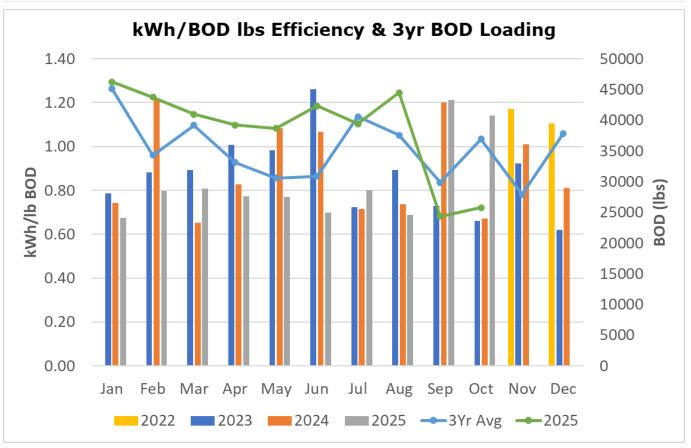
Phosphorus Tracking Graph:



Plant Efficiency Graphs:

October 2025





Approximate Expiration Date (Month) 9/30/26 New app 4/3/26 # Months to Date Comply **Permit Requirement** Reccurence Cycle Repeats? **Period Covered Permit Location** Deadline Date(s) Reported Completed **DMR Submissions** 25th day / month Yes - monthly **Previous Month** Monthly 25th 11/10/25 SC 6 **Fecal Coliform Testing Submission** 25th day / month Yes - monthly * SC10 Monthly 25th 0 May - Oct **Quarterly SWPPP Plant Inspection** NA 3/31, 6/30, 9/30, 12/31 11/13/25 Quarterly Yes Year begins each Oct **Annual SWPPP Report** SC19, K 9/30/Each Yr 2 9/11/25 Yearly Yes Previous 12 months **Pretreatment Annual Report** Annual Yes **Previous Year** SC 11, B, 1, a-e 4/28/Each Yr 3 3/26/25 Pretreatment Qrtly - DMR Tests Quarterly Yes Calendar Year SC 11, C, 1 1/25/Each Yr 25 days 1/10/25 **Qrtly Sludge Disposal DMR Report** Quarterly Yes Calendar Year 2021-SC-66254 10/6/25 1/25, 4/25, 7/25, 10/25 SC 11, C, 2, a-c 3/26/25 110 Priority Polutants Tests Yearly Yes **Previous Year** 4/28/Each Yr SC 13 **Annual Fiscal Report** Yes **Budget Year** 1/31/Each Yr 1/3/25 Yearly, email 1 Discharge 002 Reporting Special, DMR When Discharging SC 15, All Special As required Special 7/2/25 Semi-Annual Yes Jan - Jun each Yr SC 16 7/31/Each Yr Semi-Annual Sludge Report 1st 1 Semi-Annual Sludge Report 2nd Semi-Annual Yes Jul - Dec each Yr SC16 1/31/Each Yr 1 **CSO Monthly Discharge Reports** Monthly, email Yes **Previous Month** SC17, A, 1 Monthly 25th 11/4/25 12 **CSO PPP Public Meeting** Annual Yes NA SC17, C, 1 4/1 yrly 3/19/25 NA **CSO PPP Revision & Report** As needed Yes SC17, C, 1 1 mon. from revision 1 NA 12 3/19/25 CSO O&M Public Meeting Annual Yes SC17, E, 1, h 4/1 vrlv 1 mon. from revision CSO O&M Revision & Report Yes NA SC17, E, 1, h 1 As needed NA Sewer Use Ordinance Revision & Report As needed Yes SC17, F, 2 1 mon. from revision 1 CSO Long-term Control Plan (LTCP) No NA SC17, G, 1, b 9 9mos post-notification NA **CSO LTCP Report** 12mos post-notification No NA NA YES **NARP Progress Report** Semi-Annual Every 6 months SC 24 3/31 & 9/30 yrly Fixed 9/30/25 Update CMOM NA As needed NA SC18 As needed SWPPP Required Review/Update As needed NA SC19, B 9/11/25 Yes As needed 1 **PDOP Annual Progress Report** Calendar Year 12 3/26/25 Annual Yes SC21 3/31 yrly Semi-Annual **Feasibility Study Reports** March & September SC20 3/31 & 9/30 yrly Fixed 9/30/25 Yes Total P 1.0 mg/L MoAvg Compliance Final No 96mos post eff date SC23, F 9/30/29 Fixed Total P 1.0 mg/L Progress Report Yes **Previous Year** Annual SC23, A 12/31 yrly 0 Plant BNR Design Completed & Report Final No 60mos post eff date SC23, D 9/30/26 Fixed **Complete Construction & Report** Final No 90mos post eff date SC23, E 3/31/29 Fixed Total P 0.5 mg/L RGM Compliance Final No NA SC22, B,1-5 12/31/35 Fixed 40 CFR Part 503/SC16 2/19 yrly 1/9/25 Biosolids 503 Annual Report **Previous Year** 12 Annual Yes 1/13/25 3/1 yrly 12 Tier II Report Annual Yes **Previous Year**

Previous Year

Title 35 III. 809.501

Updated

12

2/1 yrly

1/22/25

11/13/25

10/1/21

Annual

HIGH IMPORTANCE

Yes

Permit Effective Date

Nonhazardous Special Waste Annual Report
""- scheduled but have not complete as of yet

Sanitary District of Decatur Nutrient Program Management Report

November 13, 2025

During the period of October 4, 2025 through November 7, 2025, District personnel attended meetings with members of the Black & Veatch team to affect progress in nutrient reduction planning and activities.

Black & Veatch coordinated with the SDD and the design consultants regarding their respective design package(s). Work consisted of site visits and bi-weekly coordination calls to discuss the design packages as shown in the following table, as well as bi-weekly coordination calls to review and discuss BIM/drafting requirements. Black & Veatch also issued an updated version of the Instrumentation and Control guidance document to the SDD and the design consultants. Black & Veatch also conducted, or is in the process of conducting, additional evaluations for the following items: alternative WRRF wetweather operation, channel air mixing, aeration design criteria, and disinfection evaluation.

The following is a list of meetings conducted. The information provided covers the subject, date, and agenda items of each meeting. Additional information related to any of these meetings or specific agenda items can be supplied to the Board upon request including meeting minutes and documentation used during the meeting as it is all being stored as part of the permanent record.

Nutrient Reduction Program Meetings conducted from October 4, 2025 through November 7, 2025

<u>Subject</u>	<u>Date</u>	<u>Agenda Items</u>
Nutrient Program Management Bi-weekly Meetings	Meetings held on 10/8/2025, 10/22/2025, and 11/5/2025	Objective: Provided Status Update on Program Tasks
Detailed Design, Donohue, Meeting	Meeting held on 10/15/2025 and 10/29/2025	Objective: Review Project Scope and Schedule Review Project Scope Review Schedule
Detailed Design, Clark Dietz, Meeting	Meeting held on 10/16/2025 and 10/30/2025	Objective: Review Project Scope and Schedule Review Project Scope Review Schedule
Detailed Design, CMT, Kickoff Meeting	Meeting held on 10/7/2025,10/21/ 2025, and 11/4/2025	Objective: Review Project Scope and Schedule ■ Review Project Scope ■ Review Schedule

Sanitary District of Decatur Watershed Management Report

November 13, 2025

During the period of October 4, 2025 through November 7, 2025, District personnel attended meetings with members of the Black & Veatch and Geosyntec team to coordinate and discuss elements essential to meet the Nutrient Assessment Reduction Plan (NARP) requirements as listed in the NPDES permit.

This month's Integrated Planning activities included reviewing the planned activities and focusing on the SDD's required input to the Integrated Plan. The SDD communicated with the City of Decatur regarding management changes within the City.

The following is a list of the meeting(s) conducted. The information provided covers the subject, date, and agenda items of each meeting. Black & Veatch provided a written summary. Additional information related to any of these items can be supplied to the Board upon request including meeting minutes and documentation used during the meeting as it is all being stored as part of the permanent record.

Watershed Management Meetings Conducted from October 4, 2025 through November 7, 2025

<u>Subject</u>	<u>Date</u>	Agenda Items
Watershed Services Bi-weekly	11100111 611101011	Objective: Geosyntec discussed Integrated
Discussions	10/29/2025	Planning.



November 12, 2025

Sanitary District of Decatur (SDD) 501 Dipper Lane Decatur, IL 62522 Nutrient Program Manager BV Project No. 411502

Attention: Don Miller, P.E., Director of Engineering

Subject: SDD Nutrient Program Management

Progress Update (October 4, 2025 – November 7, 2025)

Dear Mr. Miller:

This letter summarizes the work associated to the SDD Nutrient Program Management project for services from October 4, 2025 through November 7, 2025.

- 1. Program Management, Administration, and Coordination
 - Conducted bi-weekly program conference calls to update progress and discuss key issues.
 - Provided monthly project updates.
 - Provided ongoing management of the project including program management, preparation/monitoring of the program schedule and budget as well as program administrative duties.

2. PowerBI

Managed access to PowerBI and design consultants.

3. Watershed Support Services

Conducted a bi-weekly progress update meeting.

4. Detailed Design

- Continued coordination with potential subcontractors for surveying and geotechnical services. These services will be reviewed with the SDD and a request for an amendment to include these services in the program scope will be submitted to SDD.
- Shared a final version of the Instrumentation and Control framework document with SDD and design consultants.
- Conducted bi-weekly calls with design consultants on BIM/drafting requirements.
- Selected a compressed air mixing system for the channel mixing due to increased age and cost to replace drop legs of existing channel-air system.
- Evaluated an alternative operation to operate the WRRF's new process during wetweather and determined a Wet-Weather Step Feed approach would eliminate the need for the proposed Excess Stormwater Diversion pipe and blending approach. With this alternative approach the disinfection operation is expected to be similar to current wetweather operations and nullifies the need to conduct disinfection bench-scale testing.
- Met with SDD to discuss potential increased loadings from Tillamook and started evaluation on impact to the proposed improvements.

- Met with SDD to discuss solids storage requirements and required volume for the Wyckles facility.
- Continued the "desktop" analysis for ozone alternatives at the WRRF.
- Attended site visits with design consultants to review their project scopes.
- Met with SDD to discuss funding for the proposed improvements and developed a draft Letter of Interest for WIFIA funding.
- Received 30% design documents for Design Packages 3 and 4.

Please feel free to contact me with any questions, comments or if you need additional information. Sincerely,

Todd Archer, P.E. Engineering Manager, Black & Veatch