	State of Washington Department of Ecology	Northwest Regional Office PO Box 330316 Shoreline, WA 98113 ph: (206) 594-0000 (rev. 5-28-21)
	WASTEWATER TREATMENT PLANT COMPLIANCE INSPECTION REPORT	

Section A: General Information

Report Version	PERMIT #	mm/dd/yy	Inspection Type	Inspector Code	Facility Type
<input checked="" type="checkbox"/> New <input type="checkbox"/> Changed <input type="checkbox"/> Deleted	ST0003861	08/30/23	I	S	<input checked="" type="checkbox"/> <u>2 Industrial</u>

Remarks

Inspection work days	Facility Self-Monitoring	Photos Taken	Samples Taken	BI	QA
1.0	5.0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N	N

Lead Ecology Inspector(s)

Maia Hoffman

Section B: Facility Data

Name, Location, and Phone of Facility Inspected Perdue Foods LLC Mount Vernon (Draper Valley Farms) 1000 Jason Lane Mount Vernon, WA 98273	Entry Time	Permit Effective Date
	12:56 pm	8/1/2022
Name(s)/Title(s) of On-Site Representative(s) Jennifer Schmidt, Environmental Manager Mark Laurance, Wastewater Supervisor	Exit Time	Permit Expiration Date
	2:10 pm	7/30/2027
Name(s)/Title(s) of On-Site Representative(s) Jennifer Schmidt, Environmental Manager Mark Laurance, Wastewater Supervisor	Other Facility Data	
Name, Title, and Email of Responsible Official Matt Junkel VP of Operations matt.junkel@dvmv.com	Other Facility Data	
Contacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> CSO/SSO (Sewer Overflow)
<input type="checkbox"/> Records/Reports	<input type="checkbox"/> Effluent <input type="checkbox"/> Receiving Water	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Compliance Schedules	<input checked="" type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia
<input type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Other

Section D: Summary of Findings/Comments

I. INTRODUCTION

Ecology permit manager, Maia Hoffman, conducted a routine site visit of Draper Valley Farms on August 30, 2023. The intent of the site visit was to tour and review operations of the newly operational moving bed bioreactor (MBBR) wastewater pretreatment system. The site visit was announced and coordinated with Jennifer Schmidt. All photos, included below, were taken by M. Hoffman during the site visit.

II. RESULTS AND DISCUSSION

The MBBR pretreatment system was fully operational starting July 18, 2023. The facility was in start up operations in early July, primarily doing batch treatment using the MBBR portion of the plant.

We started the tour at the start of the treatment system, which includes the original components. Wastewater exiting the production areas is routed through rotating bar screens to remove solids such as feathers. Augers move the solids to tankers for off site reuse and/or disposal. Wastewater that passes through the bar screens is pumped to the equalization tank (EQ). From the EQ tank, wastewater is dosed with ferric chloride and a polymer and routed through a mixing pipe sequence prior to entering the primary dissolved air flotation (DAF) tank. Sludge removed from the primary DAF is called primary sludge. Primary sludge is collected in a tank next to the primary DAF tank and pumped to the wastewater sludge tanker about every hour. The system up to this point is the existing system. Wastewater used to be discharged to the City of Mount Vernon at

this point.

Wastewater gravity flows from the primary DAF tank to the pH adjustment tank. Ferric chloride and caustic are used to control pH. From here, 55% of the wastewater volume is further treated in the MBBR, while the other 45% of the wastewater volume is routed directly to the combined effluent tank. Wastewater enters the MBBR near the bottom of the tank. The pH in the MBBR is continuously monitored and Draper Valley Farms wastewater operators can dose caustic if necessary. The MBBR has dedicated blowers to maintain the optimal dissolved oxygen of the wastewater in the tank. Ammonium hydroxide and phosphoric acid are dosed to the MBBR to proper nutrient rations. M. Laurance mentioned the routine sampling that occurs to evaluate nutrient dosing, which has been stable since the system started full operation. There should be a slight nutrient residual of operating efficiently. There is supplemental carbon (glycerin) available on site to dose to the MBBR for extended shutdowns. The supplemental carbon has not been used to date. MBBR effluent discharges off the top of the tank and is routed to the secondary DAF tank. Photos 1-3 show pictures of the MBBR. The wastewater is dosed only with polymer prior to entering the secondary DAF. Sludge is skimmed off the top and pumped off the bottom of the tank and transferred to the secondary sludge tank. Photos 4 and 5 show pictures of the secondary DAF. Secondary sludge is periodically pumped to the sludge tanker truck. Wastewater from the secondary DAF gravity flows to the combined effluent tank. Pretreated wastewater is pumped from the combined effluent tank for discharge to the City of Mount Vernon sewer system. The discharge line is equipped with a valve to route inadequately treated wastewater back to the initial pit collecting wastewater from the production area to be fully routed back through treatment.

J. Schmidt and M. Laurance discussed the automatic controls on the new system, including differences in automatic operation during system start up (such as after weekends), for production wastewater, and for sanitation wastewater. J. Schmidt submitted the Operations and Maintenance (O&M) Manual to Ecology for review on 6/28/2023. Operations discussed during the site visit are outlined in the O&M Manual.

The effluent line has three continuous pH probes. Two probes were installed with the new system prior to the effluent valve. These probes control operation of the valve and ensure no wastewater is discharged outside the pH range. The final pH probe, which was in place prior to the upgrades, is after the valve and is used for permit compliance monitoring. We reviewed the pH calibration logs for the three meters. The effluent probes are calibrated twice per month. All pH probes, those used for process control, in the wastewater treatment system are calibrated quarterly.

We reviewed the daily operations log in which operators record operation characteristics and notes of the day. In addition to M. Laurance, Draper Valley Farms also employs three operators for each shift (day, swing, and night). M. Laurance said the security guards on site during weekend shutdowns perform facility walk throughs and check the water level in the EQ tank. Guards are trained on situations in which to call for support. If any major maintenance that requires water is performed on a weekend or shutdown, an operator would be on duty to monitor the system.

Back at J. Schmidt's office, we reviewed a few appendices of the O&M Manual including the treatment system drawings, spare parts list, and setpoint and range list. J. Schmidt provided a one page wastewater system schematic, see Figure 1, as well as a copy of the setpoint and range list.

We discussed discharge monitoring report submittals, specifically reporting of the rolling 3-day average (R3DA) flow. Recent DMRs show the same values for daily flow and R3DA flow. J. Schmidt should start calculating the R3DA for flow and reporting that on DMRs.

III. CONCLUSION

Wastewater treatment and management at Draper Valley Farms is compliant with the permit. Perdue has invested in a treatment system that will serve the facility into the future, as well as increasing staffing to operate the upgraded system.

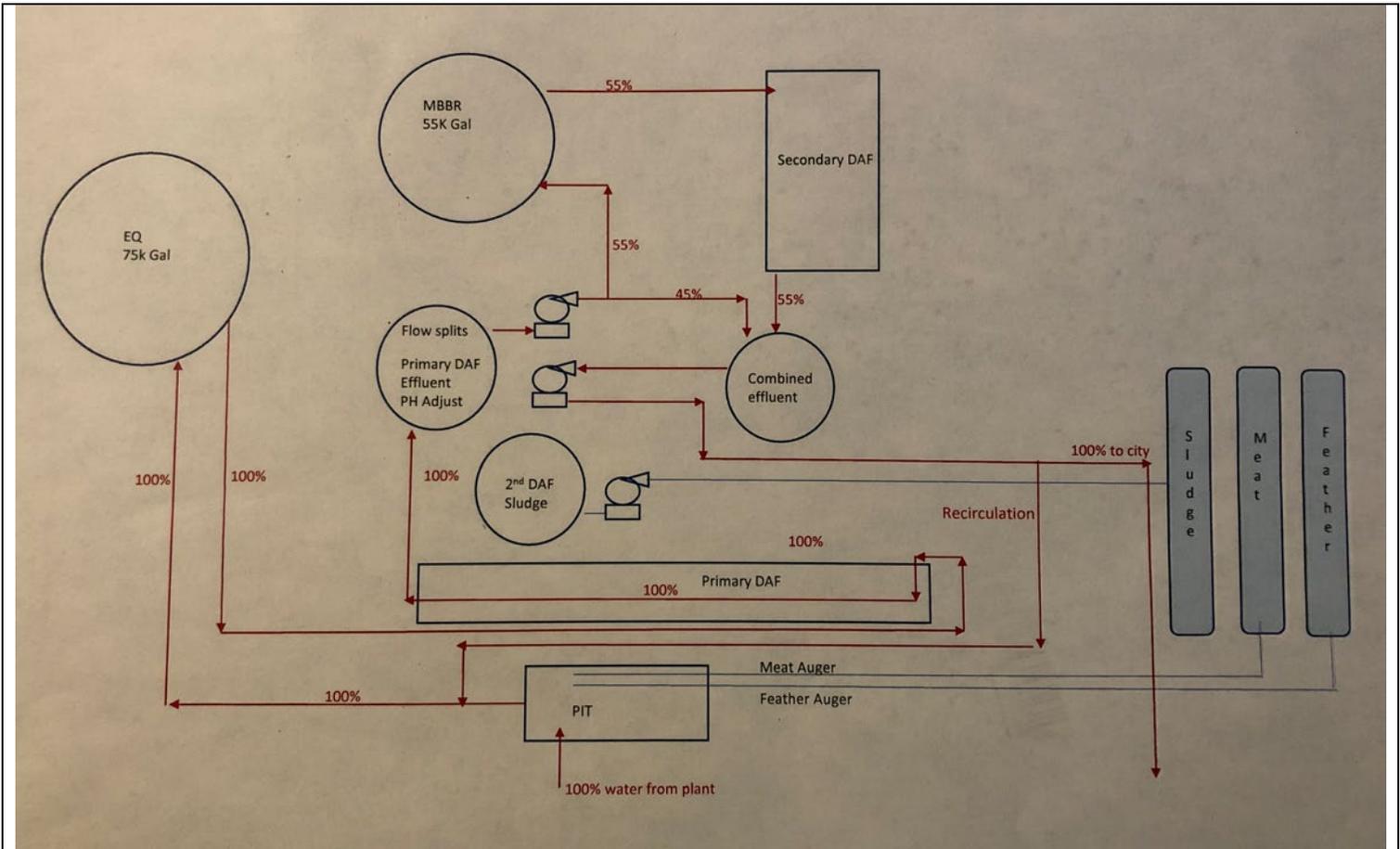


Figure 1 Wastewater treatment system schematic

Name(s) and Signatures of Inspector(s)	Agency/Office/Telephone	Date
Maia Hoffman <i>Maia Hoffman</i>	WA Dept. of Ecology, NWRO, (425) 507-5681	9/5/2023
Name and Signature of Management QA Reviewer	Agency/Office/Telephone	Date
Monika Kannadaguli <i>Monika Kannadaguli</i>	WA Dept. of Ecology, NWRO, (206) 594-0000	9/7/2023

ANNOUNCED Inspection

INSTRUCTIONS**Section A: General Information**

Report Version: **N** for 1st version, **C** for Changed or amended, or **D** for Delete

NPDES Permit No.: Enter the facility's NPDES or State permit number.

Inspection Date: Insert the date entry was made into the facility. Use the month/day/year format (e.g., 06/30/04 = June 30, 2004).

Inspection Type: Use one of the codes listed below to describe the type of inspection:

A Performance Audit	L Enforcement Case Support	2 IU Sampling Inspection
B Compliance Biomonitoring	M Multimedia	3 IU Non-Sampling Inspection
C Compliance Evaluation (non-sampling)	P Pretreatment Compliance Inspection	4 IU Toxics Inspection
D Diagnostic	R Reconnaissance	5 IU Sampling Inspection with Pretreatment
E Corps of Engineers Inspection	S Compliance Sampling	6 IU Non-Sampling Inspection with pretreatment
F Pretreatment Follow-up	U IU Inspection with Pretreatment Audit	7 IU Toxics with Pretreatment
G Pretreatment Audit	X Toxics Inspection	
I Industrial User (IU) Inspection	Z Sludge	

Inspector Code: Use one of the codes listed below to describe the *lead agency* in the inspection:

C - Contractor or Other Inspectors (Specify in Remarks Columns)	N - NEIC Inspectors
E - Corps of Engineers	R - EPA Regional Inspector
J - Joint EPA/State Inspectors - EPA Lead	S - State Inspector
	T - Joint State/EPA Inspectors - State Lead

Facility Type: Use of one of the choices below to describe the facility.

- 1 - Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2 - Industrial. Other than municipal, agricultural, and Federal facilities.
- 3 - Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
- 4 - Federal. Facilities identified as Federal by the EPA Regional Office

Remarks: These columns are reserved for remarks.

Inspection Work Days.: Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, travel time and preparation time. This estimate does not require detailed documentation.

Facility Evaluation Rating: Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Quality Assurance Data Inspection. Enter Q if the inspection was conducted as follow-up on quality assurance sample results. Enter N otherwise.

Photos Taken: Yes or No

Samples Taken: Yes or No

Lead Ecology Inspector: Enter lead inspector's name

Section B: Facility Data

This section is self-explanatory except for: "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, and other updates to the record), e-mail addresses...; and "Ecology Staff On-Site", which may include staff names, titles, phone numbers, or e-mail addresses.

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary.

Section D: Summary of Findings/Comments

Support the findings, as necessary, in a narrative report. Use the headings given on the report form (staffing, back-up power) as appropriate. Reference a list of attachments, such as completed checklists, photos, lab reports, etc. Use extra sheets as necessary.

Inspection Photos



Photo 1: View of MBBR (blue tank), influent to MBBR noted by red circle



Photo 2: View of MBBR, focusing on top of the tank.

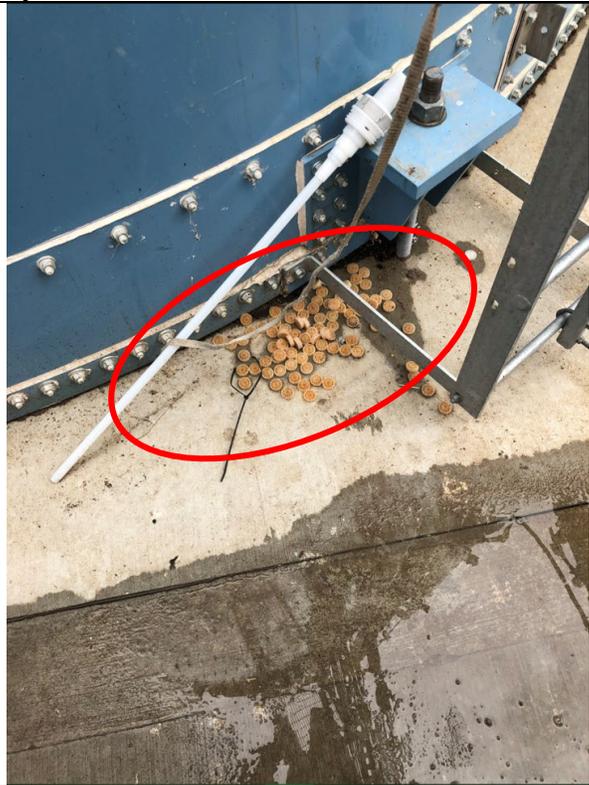


Photo 3: Example of MBBR media



Photo 4: Secondary DAF effluent in foreground, noted by red box

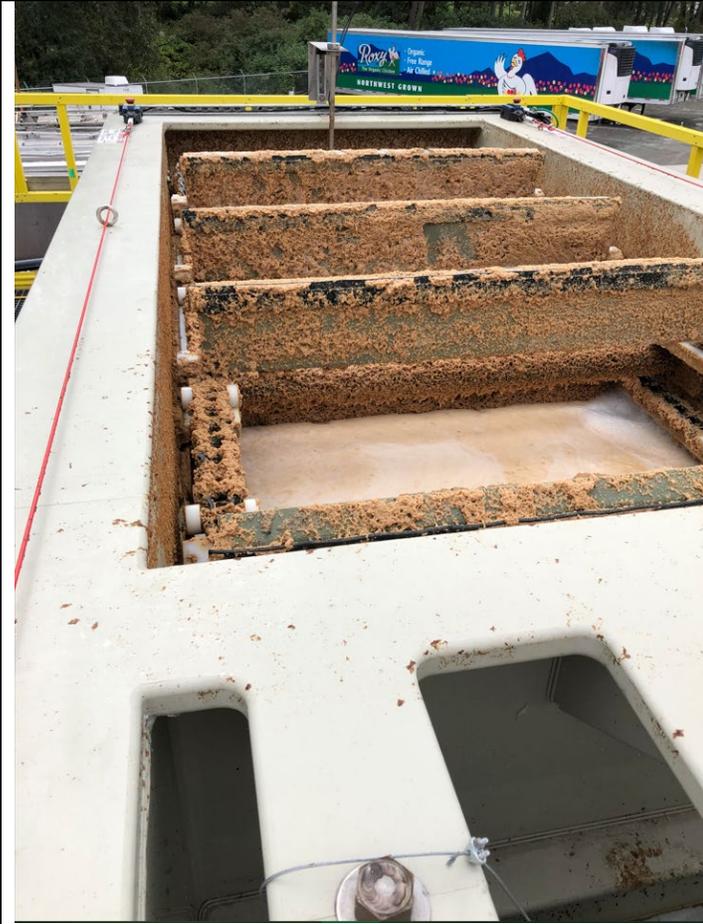


Photo 5: Secondary DAF



Photo 6: Overhead view of part of upgraded system