

		State of Washington Department of Ecology WASTEWATER TREATMENT PLANT COMPLIANCE INSPECTION REPORT			Northwest Regional Office PO Box 330316 Shoreline, WA 98113 ph: (206) 594-0000 (rev. 5-28-21)	
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	WA0002470	08/10/23	I	S	<input checked="" type="checkbox"/> 2 Industrial	
Remarks						
Inspection work days	Facility Self-Monitoring	Photos Taken	Samples Taken	BI	QA	
0.5	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 Darigold Inc. Lynden Plant 8424 Depot Rd Lynden, WA 98264			Entry Time 1:15 pm		Permit Effective Date 1/1/2019	
			Exit Time 2:25 pm		Permit Expiration Date 12/31/2023	
Name(s)/Title(s) and Email of On-Site Representative(s) Mike Jaynes, Environmental Manager michael.jaynes@darigold.com			Other Facility Data			
Name, Address, Title, Phone, and Fax Number of Responsible Official Nicholas Kokinakos, Plant Manager 8424 Depot Rd Lynden, WA 98264 nicholas.kokinakos@darigold.com						
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 checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> CSO/SSO (Sewer Overflow)			
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Effluent <input type="radio"/> 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 type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia			
<input checked="" type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Other			

Section D: Summary of Findings/Comments

Maia Hoffman, Department of Ecology permit manager, conducted a site visit at Darigold Inc. Lynden Plant (Darigold Lynden). The site visit was arranged via email with Mike Jaynes. The purpose of the site visit was to review operations of the newly installed and operating condensate of whey (COW) water treatment system prior to discharge to the Nooksack River.

Upon arrival at the site, we first looked at the COW water treatment system PLC on the computer. M. Jaynes said the system was just getting started again after a shutdown so was equilibrating. We viewed the effluent pH trend of the system which is generally between 6.5 to 7.2 standard units.

M. Jaynes was going to check the pH of the COW water treatment system effluent, so we started by doing a pH meter calibration. The pH meter M. Jaynes uses is in the process wastewater sampling shack. M. Jaynes conducts a 3-point calibration. This calibration showed a 96.8% accuracy. M. Jaynes stated the system would not calibrate if less than 95% accurate. M. Jaynes maintains a log book of all pH calibrations. (Clarification, the system rejects calibration <80% and >110%).

We next toured the COW water treatment system. The primary treatment of the wastewater is chemical treatment with peracetic acid (PAA) and secondary treatment with a hydroflow unit. The only maintenance required of the hydroflow unit is periodic checks to make sure it is on. M. Jaynes checked the PAA concentration in the treatment tank. The PAA concentration was 0.66 ppm, the ideal concentration in the tank is about 1.8 ppm. The difference noted is likely due to the system just starting up after a shutdown. M. Jaynes grabbed a sample of the effluent to check the pH.

We viewed the caustic tank storage area and dosing system as well as the PAA storage area and dosing system (Photos 2, 3, 4, and 5). The caustic is stored indoors while the PAA is stored outdoors within containment. The odor from the PAA was slightly noticeable, particularly from the dosing pump cabinet. M. Jaynes had a carbon filter installed on the tank to minimize the odor.

M. Jaynes said the system is operating well. There has been a noticeable decline in the growth of the biofilm and personnel have been able to reduce the tank cleaning frequency. Photo 1 shows the inside of the COW water treatment tank and the biofilm. At the time of the site visit, the tank had not been pressure washed in about 2 months.

We then viewed the COW water effluent discharge point from the facility (Photo 6). The outfall is cleaned once per week with a brush. At the time of the visit, the effluent flow was about 233 gallons per minute. A new sampler was installed to take flow proportional composite samples.



We returned to the sampling shack to check the pH of the COW water effluent. The pH was 7.06 standard units.

Back in the Darigold office, we discussed recent high fecal coliform counts in the Nooksack river in the vicinity of the new river outfall. M. Jaynes said there was not any out of the ordinary operation of the COW water treatment system during July. M. Hoffman inquired about any historic fecal coliform sampling of the COW water and any possible downstream connections into the outfall line. COW water is essentially distilled water from the evaporation process employed at the plant, it is unlikely that it contains measurable fecal coliform bacteria. M. Jaynes said he would look through historical data and email anything relevant. The City of Lynden owns the outfall pipe. M. Hoffman will check with City staff to see if there are any other connections to this sewer line. When the new outfall was constructed, a new line was partially installed. However, an older section of pipe remains from the Darigold plant to a point downtown where the connection with the new line was made.

We briefly discussed the permit renewal applications. M. Jaynes had recently sent an update to the application as requested by Ecology. M. Hoffman will review and communicate if any additional information is needed.

M. Hoffman did not observe any compliance concerns during this site visit. Darigold Lynden is a well-run facility, M. Jaynes is very knowledgeable about the processes and maintaining compliance with the permit.

All photos were taken by M. Hoffman during the site visit.

Name(s) and Signatures of Inspector(s)	Agency/Office/Telephone	Date
Maia Hoffman 	WA Dept. of Ecology, NWRO, (425) 507-5681	August 14, 2023
Name and Signature of Management QA Reviewer	Agency/Office/Telephone	Date
Monika Kannadaguli 	WA Dept. of Ecology, NWRO, (206) 594-0000	August 14, 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 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.

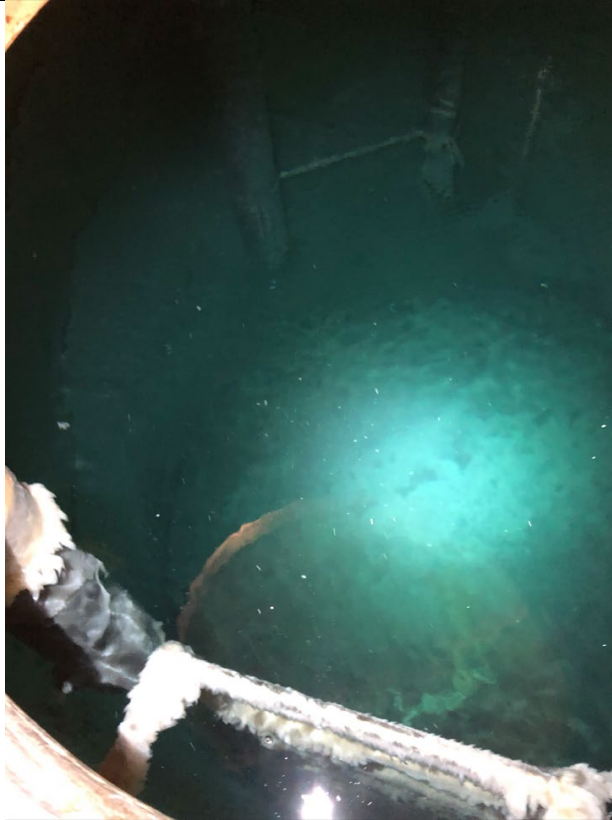
Inspection Photos

Photo 1: View inside COW water treatment tank. Biofilm is the white material forming on the surfaces of the tank.



Photo 2: Caustic dosing pump cabinet



Photo 3: Caustic storage tank



Photo 4: PAA storage tank located outdoors. The carbon filter is located on the top of the tank.



Photo 5: PAA dosing pump cabinet.



Photo 6: COW water effluent flow meter and discharge point from facility.