



NPDES Compliance Inspection Report

**Darigold – Lynden
Lynden, Washington**

Permit #: WAR000564

Inspection Date: January 27, 2022

Prepared by:

Raymond Andrews
U.S. Environmental Protection Agency, Region 10
Enforcement & Compliance Assurance Division
Water Enforcement & Field Branch
Field, Data & Drinking Water Enforcement Section

Signature/Date:

Supervisor Signature/Date:

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ATTACHMENT A – Aerial Images and Site Diagram

ATTACHMENT B – Inspection Photographs and Photograph Log

(All details in this report were obtained through conversations with Mr. Vikram Sriram, Plant Manager, and Mr. Michael Jaynes, Environmental, Health, and Safety Manager, a review of facility documents or observations made during the inspection.)

I. Facility Information

Facility Name: Darigold – Lynden

Facility Owner/Operator: Darigold Inc.

Physical Address: 8424 Depot Road
Lynden, Washington 98264
Whatcom County

Lat/Long: 48.947580, -112.451428

Mailing Address: 8424 Depot Road
Lynden, Washington 98264

NAICS Codes: 311514 (Dry, Condensed, and Evaporated Dairy Product Manufacturing)

SIC Codes: 2023 (Condensed & Evaporated Milk)

Facility Contacts: Vikram Sriram
Plant Manager
Office Phone: 360-255-6353
Email: vikram.sriram@darigold.com

Michael Jaynes
Environmental, Health, and Safety Manager
Office Phone: 360-599-0366
Email: michael.jaynes@darigold.com

Permit Number: WAR000564

Receiving Water: City of Lynden's Storm Sewer System → Fishtrap Creek →
Nooksack River

II. Inspection Information

Inspection Date: January 27, 2022

Inspectors: Raymond Andrews, Inspector
EPA Region 10, ECAD /FDDWES
Phone: 206-553-4252

Arrival Time: 9:45 AM

Departure Time: 4:00 PM

Weather: Sunny, 30°F

Purpose: To determine facility compliance with the Washington Industrial Stormwater General Permit (ISGP) and the Clean Water Act.

III. Permit Information

Darigold – Lynden is permitted under the Washington Industrial Stormwater General Permit (ISGP) for Stormwater Discharges Associated with Industrial Activities. The facility’s current permit, NPDES permit # WAR000497, became effective on January 1, 2020, and will expire on December 31, 2024. Table 3 of the ISGP indicates the facility has additional industry specific sampling requirements as a business that operates under the “Food and Kindred Products” industry.

IV. Background

Darigold – Lynden (“Facility”), located at 8424 Depot Road, Lynden, Washington is owned and operated by Darigold Inc.

On April 3, 2019, the facility experienced a large rainfall event that caused an approximately 20-minute bypass event. Per the written notification the facility submitted to the Washington Department of Ecology (WDOE) on April 4, 2019, approximately 3,200 gallons of stormwater bypassed the treatment system. No sampling was conducted on the stormwater that bypassed the treatment system. The bypass was unanticipated but allowed so the facility could restore proper filtration of stormwater.

The facility was last inspected by WDOE on May 19, 2021. WDOE found violations including failure to clean up oil spills or repair leaking equipment and failure to implement Best Management Practices (BMPs). WDOE issued a “Corrections Required” letter to the facility on June 20, 2021. The letter required the facility to “Immediately” begin sampling WDOE required parameters under the ISGP.

The facility has never been inspected by the Environmental Protection Agency (EPA).

V. Inspection Chronology

This was an announced inspection. On January 10, 2022, I emailed Mr. Doug Pettinger, Senior Director of Environmental Compliance, and told him I would be conducting an industrial stormwater compliance inspection of the Darigold – Lynden facility in Lynden, Washington on January 27th. Mr. Pettinger contacted the facility to let them know to expect me.

I conducted an opening conference, which included an interview of Mr. Vikram Sriram, Plant Manager, and Mr. Michael Jaynes, Environmental, Health, and Safety Manager followed by a records review, a site inspection, and a closing conference.

VI. Opening Conference

I arrived at the facility at 9:45 am. Upon arrival, I followed Darigold's COVID protocol which included electronically signing-in, filling out a COVID questionnaire, and having my temperature taken. Once cleared, I proceeded to the office.

I presented my credentials to Mr. Vikram Sriram and Mr. Michael Jaynes. I explained the purpose of the inspection was to determine compliance with the Washington Industrial Stormwater General Permit (ISGP) and the Clean Water Act (CWA).

The facility has been in operation at its current location since approximately 1918. The facility has approximately 60-employees and operates 24-hours a day, 7-days a week and has two production shifts, 4:00 am – 4:00 pm and 4:00 pm – 4:00 am.

The facility is a dairy milk processing center that produces powdered milk products. The facility receives whole milk which is then separated into cream and skim milk. The cream is transferred to trucks and is shipped to other Darigold facilities. The skim milk is evaporated and dried into milk powder. The powdered skim milk, or nonfat dry milk, is packaged and stored prior to shipping.

The site is approximately 4.2-acres and is generally flat. Asphalt covers 1.3-acres ($\approx 31\%$) of the site while 2.9-acres ($\approx 69\%$) is covered by buildings.

According to weatherspark.com, Lynden, Washington, receives approximate average annual precipitation of 44.70-inches. November is the wettest months with average precipitation of 7.70-inches, while July is the driest month with average precipitation of 1.0-inch.

The facility site is divided by Deport Road into an eastern side and a western side. The eastern side has the administration offices, milk receiving, milk silos, and the stormwaterRx™ filtrations system. The western side contains all the industrial milk processing equipment.

Over the past 5-years, the facility has been replacing obsolete equipment to improve product quality. The facility has added building space by moving walls internally. There have not been any changes to the facility's external footprint.

The facility uses berms to direct the stormwater to one of the approximately 21 catch basins located throughout both sides of the site. Stormwater collected by the catch basins is pumped to a 10,000 gallon stormwater storage tank on the eastern side of the site, which holds the water until it is at 30% capacity. Once the tank is at 30%, the stormwater is transferred to a 3,000 gallon tank to begin the filtration process. Once the stormwater has been filtered it discharges through a single outfall on the eastern side of the site. The outfall discharges to the City of Lynden's stormdrain system which flows into Fishtrap Creek, which is a tributary of the Nooksack River.

VII. Laboratory Inspection

The facility has statewide benchmark monitoring requirements applicable to all facilities, as well as industry-specific benchmark monitoring requirements. The statewide benchmarks are pH, turbidity, oil sheen, total copper (Cu), and total zinc (Zn). The oil sheen parameter is observational only. The industry-specific benchmarks for the facility's industry, Food and Kindred Products, are biological

oxygen demand (BOD₅), nitrate + nitrite nitrogen (N), and total phosphorus (P).

Stormwater samples are collected by Mr. Jaynes. The facility only conducts analysis for pH and observation of oil sheen. All other parameters are analyzed by:

Exact Scientific Services, Inc.
1355 Pacific Place
Suite 101
Ferndale, Washington 98248
(360) 733-1205

VIII. File Review

The Washington ISGP requires documentation be retained for a minimum of five years.

I reviewed the following records and documents:

- Most Recent NOI – dated April 10, 2019
- Permit Reissuance Letter – dated December 30, 2019
- Stormwater Pollution Prevention Plan (SWPPP) – last updated June 2021
- Monthly Facility Inspection Reports – January 2017 through December 2021
- Discharge Monitoring Reports (DMRs) – 1Q 2017 through 4Q 2021
- Chain of Custody Documents (CoCs) – 1Q 2017 through 4Q 2021
- Corrective Action
- Annual Employee Training Records – 2017 through 2021
- Annual Reports – 2017 – 2020

IX. Site Inspection

Attachment A contains an aerial map, provided by Google Maps, and a site map and diagram provided by the facility.

Attachment B contains photos used in this inspection report and a complete photo log.

Following the records review, Mr. Jaynes took me on a tour of the site. Since the scope of the inspection was the facility's industrial stormwater program, I focused on those aspects of the site.

We started the tour at the facility's offices, which were adjacent to, and on the northern side of, Deport Road. We turned to the west and walked to the facility's discharge point near Pine Street (**Photo 1 & 2**). Photo 1 also shows the manhole cover for the City's stormwater conveyance system which leads to the Nooksack River.

From the discharge point, we turned east and walked to the stormwaterRx™ Filtration System. Per Mr. Jaynes, all stormwater on the site is collected in one of 21 catch basins. The catch basins have a filter to collect oil and debris. The filters are inspected and cleaned monthly and replaced as necessary. After the stormwater has been collected by the catch basins, it is pumped into a 10,000 gallon stormwater holding tank (**Photo 4**). When the holding tank reaches 30% capacity, the water is pumped to a 3,000 gallon tank (**Photo 5**). Once the smaller tank reaches 30% capacity, water is

pumped from the tank through a sand/grit pre-filter prior to entering the stormwaterRx™ filtration system (**Photo 6**). Stormwater enters the filtration system through a pvc pipe that is designed to aid in dispersing the water along the length of the system (**Photo 7**). The water infiltrates down through the filtration media.

Once the water infiltrates through the media, it percolates back up until it overtops a pvc pipe (**Photo 8**) at the bottom of the system. The pvc pipe carrying the effluent extends outside the filtration system and connects with a horizontal pipe (**Photo 9**) that discharges into a catch basin (**Photo 10 & 11**). The effluent is sampled from the pipe as it discharges into the catch basin.

The filtration system is also equipped with an overflow pipe in the event the facility receives a large quantity of stormwater in a short time. The overflow pipe is at the top of the filtration unit. The overflow pipe can be seen in Photo 9. When the filtration unit fills to near capacity, the stormwater overflows into another pvc pipe. Photo 10 shows the untreated stormwater co-mingles with the treated stormwater prior to discharge. During times of overflow, the co-mingled stormwater is sampled.

X. Areas of Concern

At the time of inspection, I found the following areas of concern:

A. Stormwater Pollution Prevention Plan (SWPPP)

S3.B.4.i.7 of the ISGP states, in part, “The SWPPP shall include measures to identify and eliminate the discharge of process wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater sewers, or to surface waters and groundwaters of the State.”

During my review of the SWPPP, I found that the document did mention illicit discharges but did not have a section on “measures to identify and eliminate” the illicit discharges.

B. SWPPP Map

S3.B of the ISGP states “ the SWPPP shall contain a site map...”

S3.B.1 of the ISGP states the site map shall identify:

- a. The scale or include relative distances between significant structures and drainage systems.
- b. The size of the property in acres.
- c. The location and extent of all buildings, structures, and all impervious surfaces.
- d. Direction of stormwater flow (use arrows).
- e. Locations of all structural source control BMPs.
- f. Locations of all receiving water (including wetlands and drainage ditches) in the immediate vicinity of the facility.
- g. Conditionally approved non-stormwater discharges.

- h. Areas of existing and potential soil erosion that could result in the discharge of significant amount of turbidity, sediment, or other pollutants.
- i. Locations of all stormwater conveyances including ditches, pipes, catch basins, vaults, ponds, swales, etc.
- j. Locations of actual and potential pollutant sources.
- k. Locations of all stormwater monitoring points.
- l. The stormwater drainage areas for each stormwater discharge point off site (including discharges to groundwater).
- m. Locations of stormwater inlets and outfalls with a unique identification number for each sampling point and discharge point, indicating any that are identified as substantially identical, and identify, by name, any other party other than the Permittee that owns any stormwater drainage or discharge structures.
- n. Combined sewers or MS4s and where stormwater discharges to them.
- o. Locations of fueling and vehicle maintenance areas.
- p. Locations and sources of run-on to your site from adjacent properties that may contain pollutants.

At the time of the inspection, I reviewed the facility site map embedded in the SWPPP. I had the following concerns about the map:

The only required components that were on the map were “c. The location and extent of all buildings, structures and all impervious surfaces” and “j. Locations of actual and potential pollutant sources.”

C. Laboratory Analysis

1. S4.B.1.d of the ISGP states, “The Permittee shall obtain representative samples, which may be a single grab sample, a time-proportional sample, or a flow-proportional sample.”

During a review of laboratory reports from 2017 through 2021, I found the water sample collected on September 9, 2021, was past its hold time when analyzed for phosphorus. A benchmark parameter past its hold time when analyzed is not representative of the true nature of the stormwater.

2. S4.B.7 of the ISGP states, “The Permittee can reduce monitoring to once a year for a period of three years (12 quarters) based on consistent attainment of benchmark values when...a. Eight consecutive quarterly samples demonstrate a reported value equal to or less than the benchmark value; or for pH, within the range of 5.0 – 9.0.”

S4.B.7.c of the ISGP states, “The annual sample must be taken during the 4th quarter. A facility may average the annual sample with any other samples taken over the course of the 4th quarter. The annual sample does not include the first fall storm event.”

At the time of the inspection, I reviewed facility DMRs from 1Q 2017 through 4Q 2021. The facility claimed “attainment” for specific parameters from 3Q 2017 through 2Q 2020, and again in 1Q 2021. I had the following concerns:

- a. S4.B.7 of the ISGP requires facilities to have attained benchmarks for 12 consecutive quarter to reduce monitoring to once per month. However, the facility

conducted full sampling in 3Q and 4Q 2020 then again claimed attainment for turbidity and BOD benchmarks in 1Q 2021.

- b. S4.B.7.c of the ISGP requires facilities under “attainment” sample once per year, specifically in the 4th quarter. The facility did not sample all parameters, or report all sampling data, in the 4th quarter of 2017, 2018, 2019 as required.
3. S4.C of the ISGP states, “The Permittee shall ensure that analytical methods used to meet the sampling requirements in this permit conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR § 136, unless specified otherwise in this permit.”

40 CFR § 136, Table II shows water samples must be preserved at a temperature of $\leq 6^{\circ}\text{C}$.

At the time of the inspection, I reviewed laboratory chain of custody (COC) documents from 1Q 2017 through 4Q 2021. The COCs shows several quarterly water samples were above 6°C when received by the lab and several quarters when the temperature was not recorded. The quarters and temperatures are shown in the table below.

	2017	2018	2019	2020	2021
1Q	NR	NR	NR	10.7°	8.2°
2Q	NR	$\leq 6^{\circ}\text{C}$	NR	14.0°	10.2°
3Q	NR	NR	10.6°	16.6°	12.4°
4Q	19.1°	12.2°	16.3°	18.5°	NR

* NR = Not Recorded

4. S5.A.1, Table 2, Footnote C states, “Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution of ± 0.5 SU or better.”

During the inspection, I inspected the facility’s pH meter and the Buffer pH 4, Buffer pH 7 and Buffer pH 10 calibration solutions. The calibration solutions for Buffer pH 4 and Buffer pH 10 expired in July 2021.

5. S5, Tables 2 and 3 of the ISGP indicates the analytical methods authorized for each benchmark parameter. The ISGP indicates the analytical method of SM 5210B for BOD_5 , SM4500 $\text{NO}_3\text{-E/F/H}$ for the parameter nitrate + nitrate nitrogen (N), and EPA 356.1 for phosphorus (P).

S5, Footnote a. of Table 2 and 3 of the ISGP states, “The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method, it must report the test method and QL on the discharge monitoring report. The permittee must also upload the QA/QC documentation from the lab on the QL development.”

At the time of inspection, I reviewed the facility SWPPP and laboratory documents and found the following concerns:

- a. The SWPPP indicates the lab may use analysis method EPA 405.1 or SM 5210B for BOD₅. The ISGP does not authorize the use of analysis method EPA 405.1 for this parameter.
- b. The SWPPP indicates the analysis method for nitrate + nitrite nitrogen (N) is EPA 353.1. However, the ISGP does not indicate analysis method 353.1 can be used.
- c. I did not see QA/QC documentation from the lab on QL development.

D. Monthly Inspection Reports

1. S7.A.1 of the ISGP states, “The Permittee shall conduct and document visual inspections of the site each month.”

At the time of the inspection, I requested to review monthly inspection reports from January 2017 through December 2021. There were 10 monthly inspection reports that were not available. The missing reports were for the following months:

- February, June – December 2017
 - October 2018
 - October 2019
2. S7.C.1 of the ISGP states, in part, “The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site, as part of the SWPPP, for Ecology review. The Permittee shall ensure each inspection report documents the observations, verifications and assessments required in S7.B and includes:
 - c. Statements that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Condition G2, the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this permit.
 - f. Certification and signature of the person described in Condition G2.A, or a duly authorized representative of the facility...”

During my review of the routine monthly inspection reports, I found the following concerns:

- a. The responsible person did not sign or certify the inspection reports in the following months:
 - April 2017
 - January – September 2018
 - June 2021
- b. The responsible person did not indicate if the facility was in compliance with the ISGP in the following months:
 - April and May 2017
 - January – September 2018
 - May and June 2019
 - April and June 2021

E. Corrective Actions

S8.B of the ISGP states, in part, “Permittees that exceed any applicable benchmark value(s)...for any quarter during a calendar year shall complete a Level 1 Corrective Action for each parameter exceeded...”

At the time of the inspection, I reviewed Discharge Monitoring Reports (DMR) from 1Q 2017 through 4Q 2021. The DMRs show the facility exceeded its benchmark quarterly average for “Nitrate + Nitrite Nitrogen, as N” in 3Q 2019, 3Q 2020, and 2Q 2021. Based on the exceedances, the facility was required by the ISGP to complete Level 1 Corrective Action Forms for each incident.

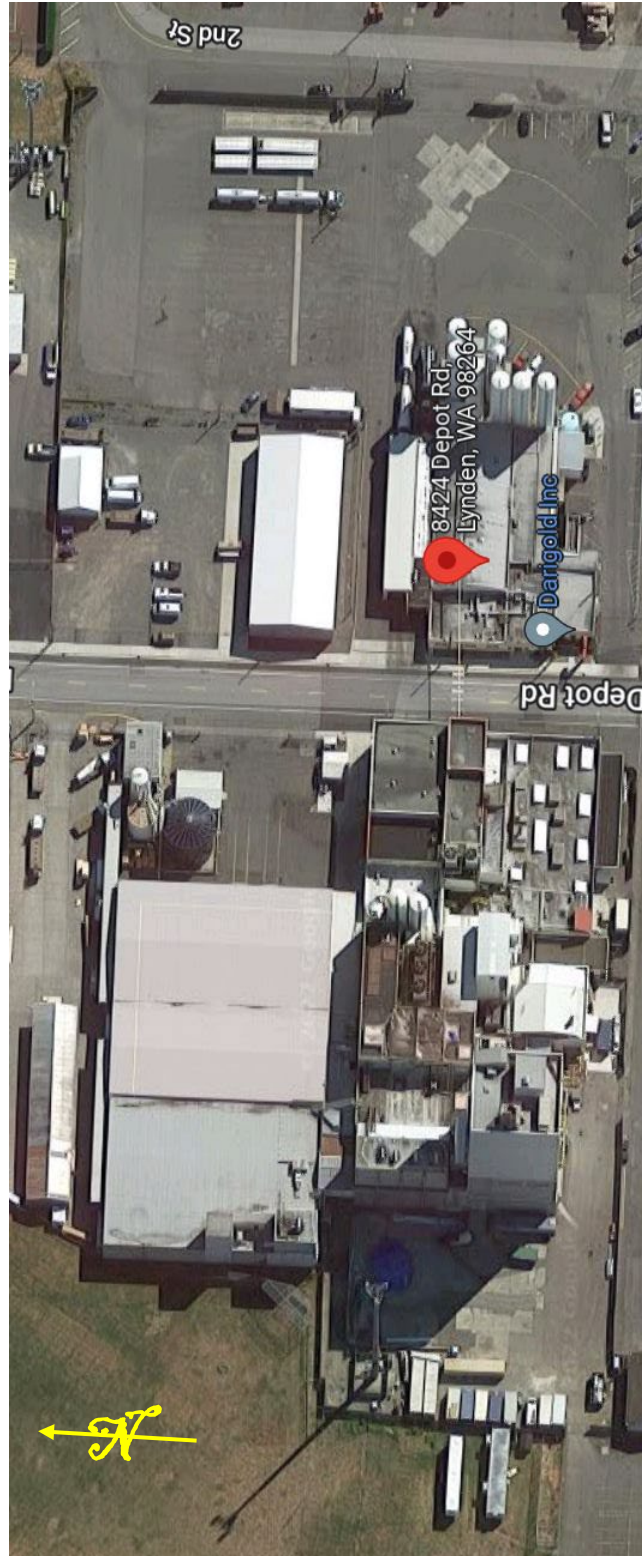
Upon request, the facility provided “Stormwater Maintenance/Corrective Action Forms.” The facility did not provide a Corrective Action Form for the benchmark exceedance in 2Q 2021.

XI. Closing Conference

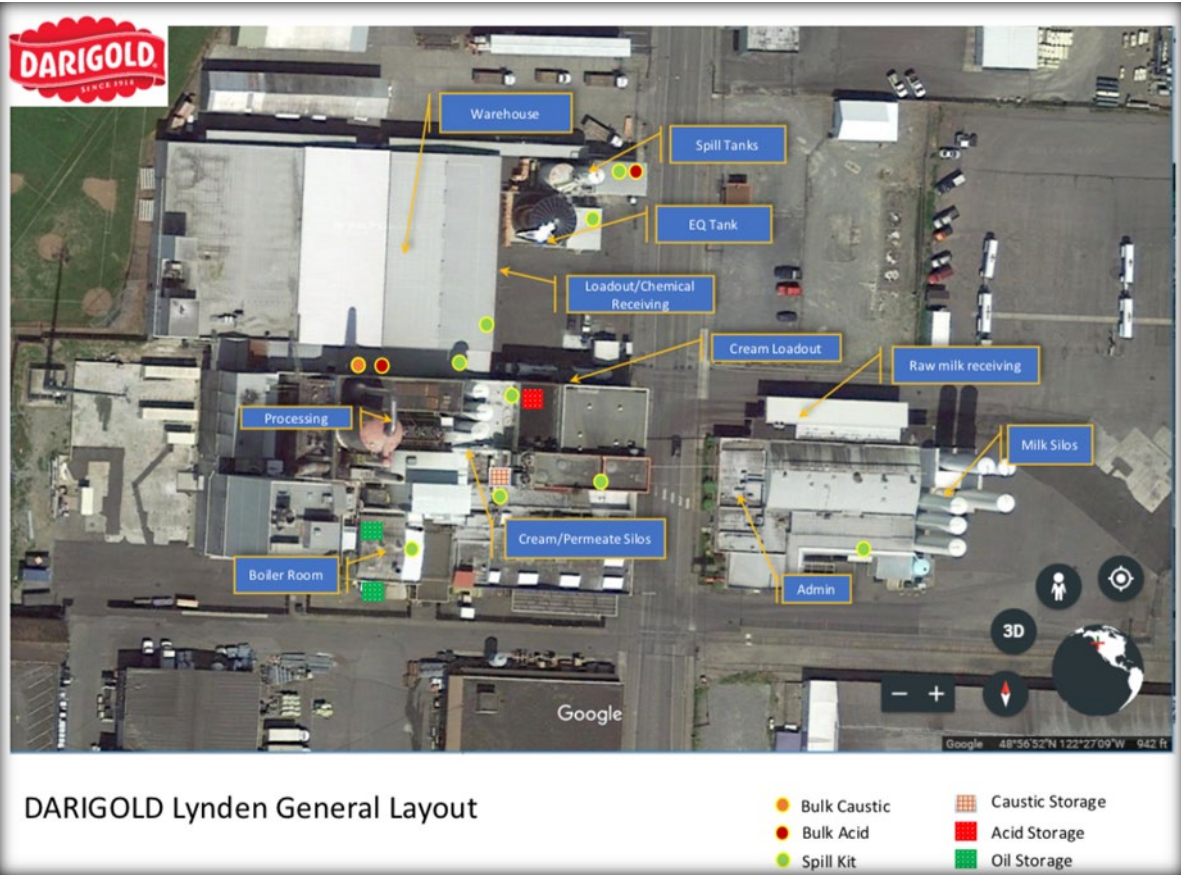
On January 27, 2022, I held a closing conference with Mr. Sriram and Mr. Jaynes. We discussed my observations, and I gave a brief overview of the post-inspection process. I thanked him for his time and assistance.

ATTACHMENT A

Aerial Image of Site Provided by Google



Site Map Provided by Facility



[illegible]

ATTACHMENT B

Inspection Photographs and Photograph Log

(Photographs taken by Ray Andrews on January 27, 2022, with a Panasonic DMC-FH25 camera)



Photo 1 / P1010223 – Discharge Point to City Sewer, facing west

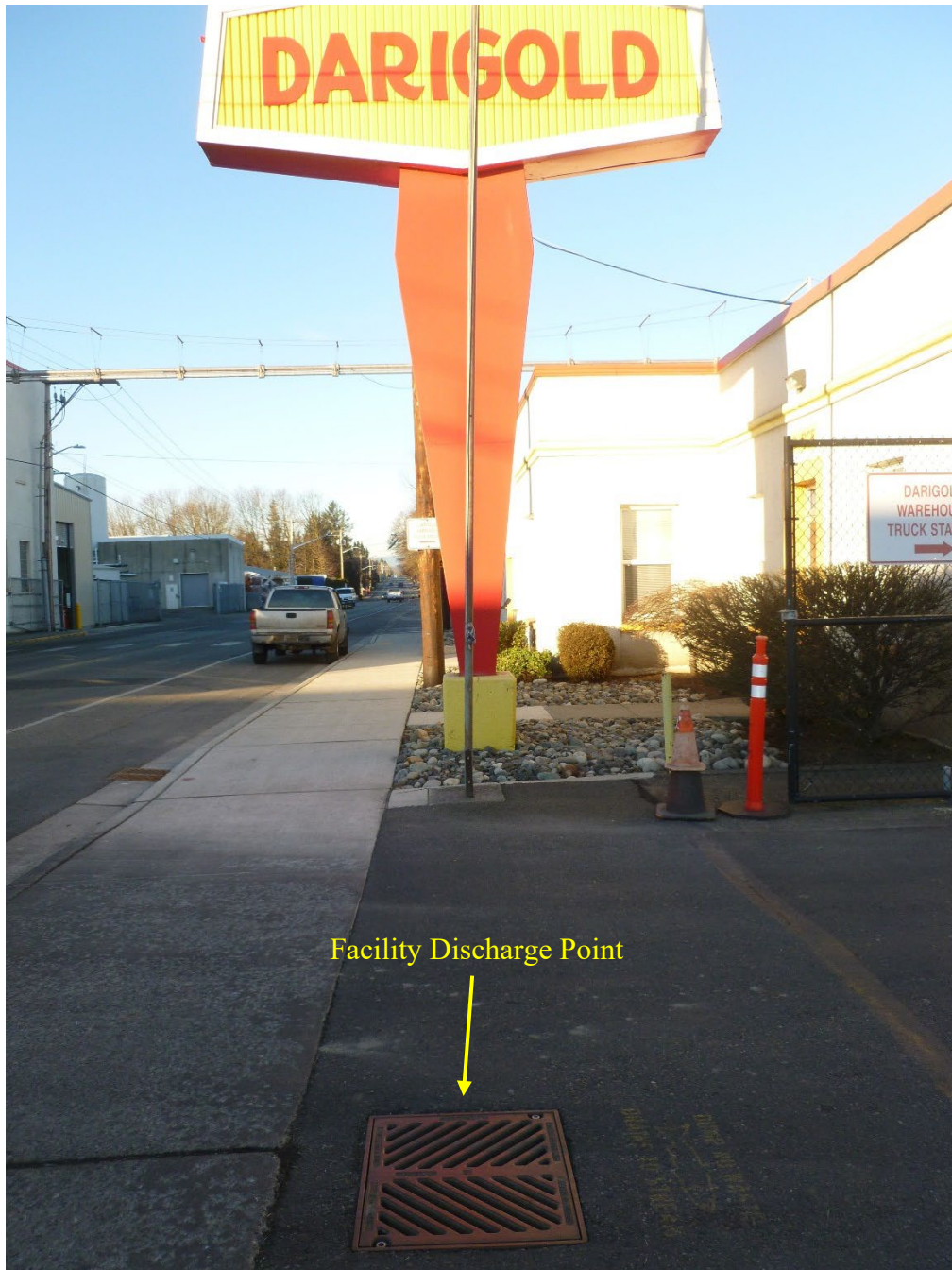


Photo 2 / P1010224 – Discharge Point to City Sewer, facing north



Photo 3 / P1010237 – Catch Basin with Filter



Photo 4 / P1010227 – 10,000 Gallon Stormwater Tank



Photo 5 / P1010230 – 3,000 Gallon Stormwater Tank



Photo 6 / P1010223 – Discharge Point to City Sewer, facing west



Photo 7 / P1010233 – Interior of Filtration System with Diffusion Pipe



Photo 8 / P1010232 – Interior of Filtration System, effluent side



Photo 9 / P1010234 – Effluent Side of Filtration System

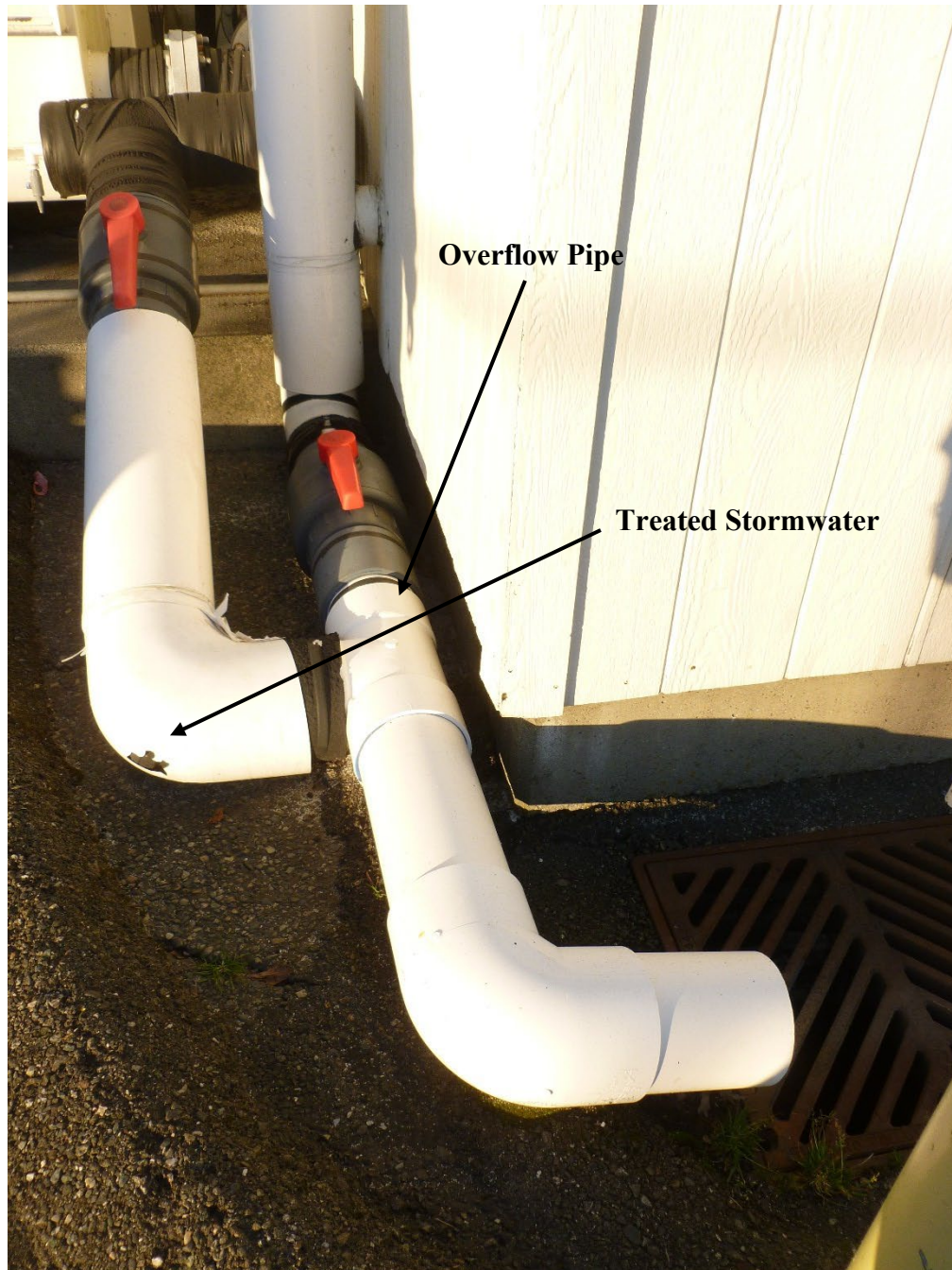


Photo 10 / P1010235 – Discharge Pipe



Photo 11 / P1010236 – Sampling Point

Complete list of photographs taken during the inspection:

- P1010211 – SWPPP Certification Form, dated June 23, 2021
- P1010212 – pH Logbook Cover
- P1010213 – PH Logbook Example Page
- P1010214 – pH Meter, photo 1
- P1010215 – pH Meter, Photo 2
- P1010216 – pH Buffer 4.0
- P1010217 – pH Buffer 7.0
- P1010218 – pH Buffer 10
- P1010219 – pH Buffer 4, back label, expired July 2021
- P1010220 – pH Buffer, 7, back label, expires August 2023
- P1010221 – pH Buffer, 10, back label, expired July 2021
- P1010222 – pH Buffers, 4, 7, and 10
- P1010223 – Discharge Point to City Sewer, facing west
- P1010224 – Discharge Point to City Sewer, facing north
- P1010225 – Catch Basin
- P1010226 – Filtration System Diagram
- P1010227 – 10,000 Gallon Stormwater Tank
- P1010228 – 3,000 Gallon Stormwater Tank, photo 1
- P1010229 – 3,000 Gallon Stormwater Tank, photo 2
- P1010230 – 3,000 Gallon Stormwater Tank, photo 3
- P1010231 – StormwaterRx™ Filtration System
- P1010232 – Interior of Filtration System, effluent side
- P1010233 – Interior of Filtration System with Diffusion Pipe
- P1010234 – Effluent Side of Filtration System
- P1010235 – Discharge Pipe
- P1010236 – Sampling Point
- P1010237 – Catch Basin with Filter, photo 1
- P1010238 – Catch Basin with Filter, photo 2