



NPDES Compliance Inspection Report

Hill AeroSystems

**NPDES Permit Tracking Number
WAR126743**

Inspection Date: 05/12/2023

Prepared by:

Kyle Masters
U.S. Environmental Protection Agency, Region 10
Enforcement & Compliance Assurance Division
Water Enforcement & Field Branch
Surface Water Enforcement Section

Inspector Signature/Date:

Masters, Jonathan	Digitally signed by Masters, Jonathan Date: 2023.08.01 19:55:50 -07'00'
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Supervisor Signature/Date:

JASON RODRIGUEZ	Digitally signed by JASON RODRIGUEZ Date: 2023.08.02 09:09:06 -07'00'
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I. Facility Information

Facility Name: Hill AeroSystems Inc.

Facility Owner: Mr. Steve Hill

Facility Address: 911 Battersby Avenue
Enumclaw, Washington 98022

Mailing Address: 911 Battersby Avenue
Enumclaw, Washington 98022-8204

Facility Contact(s): Mr. Joe Thornton, General Manager
Hill AeroSystems
(253) 247-1728
joethornton@hillaerosystems.com

Latitude/Longitude: N 47.20683 W -121.98238

NPDES Tracking Number: WAR126743

NAICS Code(s): 336413

Facility Size: Approximately 3.07 acres, including buildings, 1.74
acres exposed

II. Inspection Information

Inspection Date: May 12, 2023

Inspector(s): Kyle Masters, Inspector
EPA Region 10, ECAD / SWES

Rose Propst, Inspector
Washington Department of Ecology

Darren Chromey, Source Control Inspector
City of Enumclaw

Arrival Time: 9:45 AM

Departure Time: 11:25 PM

Weather: Mostly Sunny

Purpose: To evaluate compliance with the requirements of the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) and the State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities.

[Unless otherwise noted, all details in this inspection report were obtained from conversations with Mr. Thornton, or from observations made during the inspection.]

III. Permit Information

Hill AeroSystems (“Facility”) possesses coverage under the State of Washington Department of Ecology’s Industrial Stormwater General Permit (ISGP, or “Permit”). The Facility first acquired permit coverage on March 6, 2013, with permit coverage since then. The Facility’s current permit tracking number is WAR126743. The current version of the ISGP became effective on January 1, 2020 and expires on December 31, 2024. The Facility submitted their latest Notice of Intent for permit coverage in July 2019. The most recent Ecology inspection of the Facility occurred on August 15, 2018.

Table 2 of the ISGP, at Section S5.A, lists the benchmarks and sampling requirements all facilities must follow. Table 3, at Section S5.B., requires facilities engaged in transportation equipment manufacturing (NAICS 336xxx) to sample and follow the additional benchmark monitoring program for Petroleum Hydrocarbons (Diesel Fraction). Hill AeroSystems currently operates with the 336413 NAICS code, and therefore must follow the additional sampling and monitoring requirements in Table 3.

Table 2: Benchmarks and Sampling Requirements Applicable to All Facilities

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Limit	Minimum Sampling Frequency
Turbidity	NTU	25	EPA 180.1 Meter	0.5	1/quarter
pH	Standard Units	Between 5.0 and 9.0	Meter/Paper	+/- 0.5	1/quarter
Oil Sheen	Yes/No	No Visible Oil Sheen	N/A	N/A	1/quarter
Copper, Total	µg/L	Western WA: 14	EPA 200.8	2.0	1/quarter
Zinc, Total	µg/L	117	EPA 200.8	2.5	1/quarter

Table 3: Additional Benchmarks and Sampling Requirements to Specific Industries

Machinery Manufacturing (336xxx)					
Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Limit	Minimum Sampling Frequency
Petroleum Hydrocarbons (Diesel Fraction)	mg/L	10	NWTPH-Dx	0.25	1/quarter

IV. Facility Background

Hill AeroSystems manufactures a variety of aerospace parts and assemblies (multi-part kits) used in civilian and military production airframes. The Facility receives raw materials and performs design, tooling, machining, and assembly before shipping the finished product off-site for coatings and final assembly with their customers.

Business hours are Monday through Friday, 7 AM – 3:30 PM. The Facility employees approximately 65 staff, Facility representatives told us.

V. Inspection Chronology

This was an unannounced inspection. Upon arriving on-site, I, along with Ms. Propst from the Washington Department of Ecology and Mr. Chromey from the City of Enumclaw, knocked at the locked front door. An employee let us in and asked us to sign in for their records while he called a manager. Mr. Joe Thornton, Facility General Manager, met us and I presented my inspector credentials.

Mr. Thornton escorted us to the Facility lunch room and explained Mr. Steve Hill was not at the site and was in travel status. Mr. Thornton called Mr. Hill for the opening conference.

The inspection consisted of an opening conference, a walk-through of the Facility, a tour of the areas outside the main Facility, and ended with a closing conference. We were accompanied throughout the inspection by Mr. Thornton.

VI. Opening Conference

We held the opening conference shortly after our arrival. Ms. Propst, Mr. Chromey, and I introduced ourselves to Mr. Thornton and Mr. Hill (via phone). I explained I was leading industrial stormwater compliance evaluation inspections in the area. We then discussed the purpose and scope of the inspection.

During the opening conference Mr. Thornton provided a brief overview of activities at the Facility and told us the Facility's operating hours and number of staff. Mr. Thornton also told us he started working at the Facility approximately two years ago. Mr. Hill told us the Facility has put a lot of effort into the stormwater program in the past six months, including installing a filter treatment system to help control the high zinc and copper totals they saw from the discharge sample and monitoring the previous winter. Mr. Hill also told us the Facility contracted services through Sound Earth Strategies, including Mr. Will Hafner, to assist with stormwater monitoring and permit requirements.

I told Mr. Hill and Mr. Thornton my preference of reviewing all permit-required documents after the site review. Mr. Hill told us he kept the most current versions of those documents electronically on his computer, which was unavailable as he was travelling. I told him I would send him an email after the inspection requesting electronic versions of the documents. We thanked Mr. Hill for his time, concluded the opening conference and proceeded with the site

review with Mr. Thornton.

VII. Site Review

We began with a walk through of the Facility's production area. Mr. Thornton pointed out the assorted CNC Machines, drills, lathes, and the water jet Facility staff use in their operations. We observed drums of QualiChem products staged on the production floor, both Quick Slide 68 (way oil) and Xtreme Cut 250 (machining and cutting fluid). We moved outside, to the northwest side of the main building, and Mr. Thornton showed us the outside waste storage area (**Photo 6**). Mr. Thornton told us the Facility recently completed a facility-wide housekeeping exercise and they staged the old, expired, unused, and spent materials here prior to shipping them off-site.

Against the building's exterior wall, next to a spill kit, we saw a pallet with four 55-gallon drums of hydraulic fluid staged for pickup (**Photo 1**). Next to the spill kit we saw a partly full 275-gallon tote of used oil (background, **Photo 6**). Next to the hydraulic fluid, on an adjacent pallet, we saw containers of various chemicals including sodium hydroxide and muriatic acid (**Photo 2**), and a drum with an open bung hole labeled as "Waste paint" (**Photo 10**). I pointed out the incompatibility and general unsafe storage of keeping a base next to an acid to Mr. Thornton. We also discussed the volume of liquids stored in the waste storage area specifically, and an apparent lack of curbing, dikes, or spill containment pallets.

Next, we saw a 55-gallon drum of QualiChem with an open bung and a small bucket holding an oily liquid and rags (**Photo 3**). In the area, we also saw two clamshell-type over containers. One held two drums of product solvent, both isopropyl alcohol and methyl ethyl ketone. The second, with a faded Hazardous Waste label on the lid (**Photo 4**) held an open drum holding smaller containers of discarded coatings and other products, including aerosol cans. Mr. Thornton told us he thought the second drum was empty.

By the clamshells we saw a flammables storage cabinet holding a variety of chemical products Mr. Thornton characterized as largely expired (**Photo 7**). Inside the cabinet we saw a variety of oils, including lighter fluid and motor oil, paints, and detergents. Looking north from this spot we saw six dumpsters in a row that Mr. Thornton said accumulated various sizes and types of scrap metal generated at the Facility (**Photo 8**). Mr. Thornton pointed out the constructed roof lines overhanging the northmost dumpsters. He said staff routinely add scrap to those dumpsters during their shifts and tended to leave the attached lids open. Later, we saw absorbent sock-style filters placed on the ground around the bases of the dumpsters. The photo also shows the entire raised dock-like outdoor storage area lacked a berm or other surface feature serving as a means of containment.

North of the outdoor waste storage area we saw additional material storage and an approximately 30-gallon gray drum on a wood pallet with a pump on top (**Photo 9**). We also noted the apparent absorbent material on the ground in the drum's vicinity. Southwest of the area storing the Facility's hazardous waste we saw two dumpsters next to the exterior wall of the Facility. The lid on the rearmost dumpster sat open. In the foreground we saw reddish fine particulate matter on the ground. It appeared similar to a spent blasting material like garnet (**Photo 11**).

Further to the southwest, we saw many large aircraft part tooling pieces lying on the ground (**Photo 12**). Mr. Thornton explained the equipment was out of date and the Facility was attempting to send it back to their principal client. We also saw an older drill staged here. Mr. Thornton confirmed the Facility no longer used it and sought to move it off-site. To the north, attached to a downspout of the second building, Mr. Thornton showed us the Facility's recently installed stormwater treatment system (**Photo 13**). He said the Facility installed the biochar system after observing higher metal content in their autumn 2022 quarterly stormwater sampling.

Between the two buildings, in the center of the parking lot, we saw a catch basin with an inlet cover and screen installed. Mr. Thornton told us this catch basin received stormwater from the industrial areas of the Facility, and the Facility referred to it as Catch Basin 1 (**Photo 14**). Mr. Thornton told us stormwater flows northwest to a second catch basin, which he said serves as their outfall and monitoring location (**Photo 15**).

We moved south, between the two buildings and saw what appeared to be the box trailer portion of a box-type truck on the ground. We looked inside and saw three 55-gallon drums, an approximately 200-gallon tank, seven 5-gallon pails, and many smaller containers holding a variety of oils (**Photo 16**). We noted one of the larger containers sat on a spill pallet with plywood covering the grating of the pallet and possibly rendering it an insufficient containment device. We also observed a spill kit in the rear of the trailer, and a large pile of used absorbent pads on the floor next to the trailer. Outside the trailer we saw more large tooling pieces stored outside without cover (**Photo 17**). Mr. Thornton indicated the Facility also sought to dispose of this equipment.

We walked around the north of the main building and observed a large generator (**Photo 18**). Mr. Thornton told us the Facility rarely used the generator due to the expense of operation. We did not see fuels or other chemicals and products stored in the area. We then walked north around the perimeter of the second building. We saw a third catch basin to the north of the second catch basin (the monitoring point) (**Photo 19**). The area appeared recently cleared of vegetation. At the time Mr Thornton said he was not sure about the purpose of the catch basin because he thought the other two the extent of the conveyance system in the area.¹ Around this catch basin, to the north, we saw some standing water. The water appeared to flow north, across the surface, and discharge onto the neighboring property (**Photo 20**).

VIII. File Review

During the opening conference I explained I wanted to review the permit required documentation after the site review. After Mr. Hill explained his travel status and inability to provide the documentation at that time, I agreed to email my document request as the inspection and review the records offsite.

On May 12, I emailed Mr. Hill and requested the following records by May 17:

¹ Note, the Stormwater Pollution Prevention Plan refers to this catch basin as an emergency overflow for the area.

- The Facility's SWPPP including the site map.
- Annual reports for 2019-2022.
- Permit coverage letter.
- Sampling records and DMRs since 2019.
- Site inspection reports since 2019.
- Additional information on the biochar-based treatment BMP recently installed.

On May 15, I received:

- Information on the biochar treatment system.
- Contract for services with Sound Earth Strategies.
- Sampling records from April 2023.
- DMR records for May 2023 (April sample).
- Monthly inspection records for January – April 2023, 2022 (entire year).
- Annual report for 2022.
- SWPPP Certification Form signed by Mr. Hill on May 12, 2023.

I emailed Mr. Myron later May 15 asked for the records outstanding from my original request. Mr. Hill responded that day and said the third observed catch basin serves as an overflow distribution facility and overflows go to an off-site, neighboring pond.

On May 26, Mr. Thornton email monthly site inspection records for 2021, 2020, and 2019. Mr. Hill also emailed that day and expressed some confusion as he thought all the records had been sent. Between May 26 and May 30, Mr. Thornton and Mr. Will Hafner of Sound Earth Strategies sent the outstanding records. I note the following observations from these records:

- On February 14, 2022 the Facility submitted a DMR for the Fourth Quarter of 2021. The DMR reported benchmark exceedance for copper and zinc from a December 29, 2021 sampling event. The DMR reported values of 22.6 µg/L for copper and 248 µg/L for zinc.
- The 2022 Annual Report, signed by Mr. Hill on May 9, 2023, states the catch basin filter was not replaced on schedule. The report also states the Facility took corrective action on February 13, 2023.

IX. Areas of Concern

Observations during the inspection, and follow-up records review, identified the following areas of concern.

A. Record Availability

Section S9.D.3. of the Permit states, "The Permittee shall make all plans, documents, and records required by this permit immediately available to Ecology or the local jurisdiction upon request; or within 14 days of a written request from Ecology."

1. During the inspection's opening conference, on May 11, I verbally informed Mr. Hill and Mr. Thornton I requested to review the Facility's SWPPP, annual reports, monthly

site inspection reports, sampling records and DMRs recording actual discharges, and permit coverage letter. On May 12, I emailed my records request to the Facility. The Facility did not send me all the requested documents until May 26.

B. Stormwater Pollution Prevention Plan (SWPPP)

Section S3.B.1. of the Permit states, “The site map shall identify...”

Section S3.B.1.b. of the Permit states, “The size of the property in acres.”

Section S3.B.1.m. of the Permit states, “Locations of stormwater inlets and outfalls with a unique identification number for each sampling point and discharge point...and identify, by name, any other party other than the Permittee that owns any stormwater drainage or discharge structures.”

2. The site map in the Facility’s SWPPP fails to identify the size of the property in acres.

3. During the inspection we observed stormwater apparently leaving the Facility at the far north of the property (**Photo 20**). The site map does not list this potential discharge point.

Section S4.B.7. of the Permit 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...”

4. The Facility’s SWPPP, under “Analysis Parameters” on pdf pg. 26 states, “The Facility may suspend stormwater sampling for one or parameters (other than “visible oil sheen”) for a period of 3 years (12 quarters) based on consistent attainment of benchmark values...”

The Permit requires yearly monitoring. The SWPPP misstates this provision of the Permit.

Section S3.A.3. of the Permit states, “The Permittee shall modify the SWPPP if the owner/operator...determines...the SWPPP is, or would be ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee shall modify the SWPPP: As necessary to include additional or modified BMPs designed to correct problems identified.”

5. The Facility’s SWPPP does not list the Biochar treatment BMP we observed during the inspection (**Photo 13**). The SWPPP records a last update date of May 2023.

6. The Facility’s SWPPP, on pdf page 18, Table 4-1, lists an incorrect and out-of-date phone number for Ecology’s Northwest Regional Office. The SWPPP records a last update date of May 2023.

C. Best Management Practices (BMPs)

Section S3.B.4.b.i.2. of the Permit states, “The SWPPP shall include BMPs that define ongoing maintenance and cleanup, as appropriate, of areas which may contribute pollutants to stormwater discharges. The SWPPP shall include the schedule/frequency for completing each housekeeping task...The Permittee shall...vacuum paved surfaces...Keep all dumpsters under cover or fit with a storm resistant lid that must remain closed when not in use.

7. We observed one open dumpster during the inspection (**Photo 11**).

Section S3.B.4.b.i.3.d of the Permit states, “Clean up spills and leaks immediately (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.”

8. During the inspection we observed an apparent spill of a reddish fine substance similar to spent blast material or sand next to an open dumpster (**Photo 11**).

Section S3.B.4.b.ii.2 of the Permit states, “The SWPPP shall include BMPs to minimize the exposure of manufacturing, processing, and material storage areas...to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.”

9. The Facility SWPPP, on pdf pg. 21, states, “Most material storage areas...are protected from rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings if left out overnight.” However, during the inspection we observed multiple large pieces of tooling equipment left outside without cover (**Photos 12 and 17**). Mr. Thornton indicated the equipments had been staged outside for a period of months.

Section S3.B.4.b.i.3.b of the Permit states, “The Permittee must (m)aintain ponds, tanks/vaults, catch basins, swales, filters, oil/water separators, drains, and other stormwater drainage/treatment facilities in accordance with the maintenance standards set forth in the applicable Stormwater Management Manual...”

10. The 2022 Annual Report states a catch basin insert filter had not been replaced as scheduled.

Section S3.B.4.b.i.4. of the Permit states, “The SWPPP shall include a Spill Prevention and Emergency Cleanup Plan that includes BMPs to prevent spills that can contaminate stormwater. The (plan) shall specify BMPs for material handling procedures, storage requirements...The Permittee shall: Store all hazardous substances, petroleum/oil liquids, and other chemical solid or liquid materials that have potential to contaminate stormwater on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume of the largest tank, whichever is greater...”

11. During the inspection, at the outside waste storage area, we observed numerous containers of waste oils, paints, fuels, solvents, and other chemicals stored without containment (**Photos 1-3, 5-7, 9 and 10**)

12. In the oil storage area we saw multiple containers of oil, the largest of which appeared to be a 200-gallon tank stored in an area apparently lacking 220 gallons of containment capacity (**Photo 16**).

D. Waste Management

Section S12 of the Permit states, "The Permittee shall not allow solid waste material or leachate to cause violations of the State Water Quality Standards..."

Section G7 of the Permit states, "Nothing in this Permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations."

13. During the inspection we observed containers of sodium hydroxide and muriatic acid sitting next to each other (**Photos 2 and 10**). These two chemicals are mutually incompatible, and a spill of either could result in a dangerous reaction threatening human health and the environment.

X. **Closing Conference**

After we completed the site tour, we held a brief closing conference with Mr. Thornton. I reiterated I would send a records request through email after the inspection. I discussed my observations and areas of concern with him, including the incompatible chemical storage, apparent inadequate secondary containment, and the open dumpster with fine material on the ground. I then thanked Mr. Thornton for his time and cooperation with the inspection.

ATTACHMENT A

Satellite Imagery

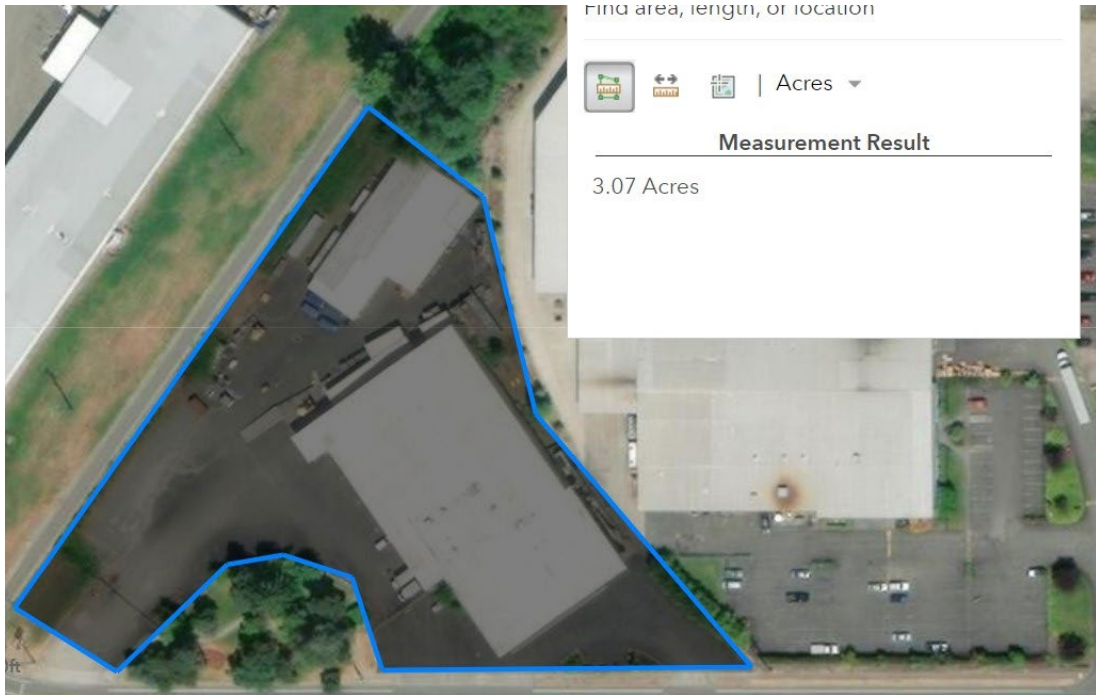


Figure 1: GIS Imagery showing the Facility's total foot print at approximately 3.07 acres.

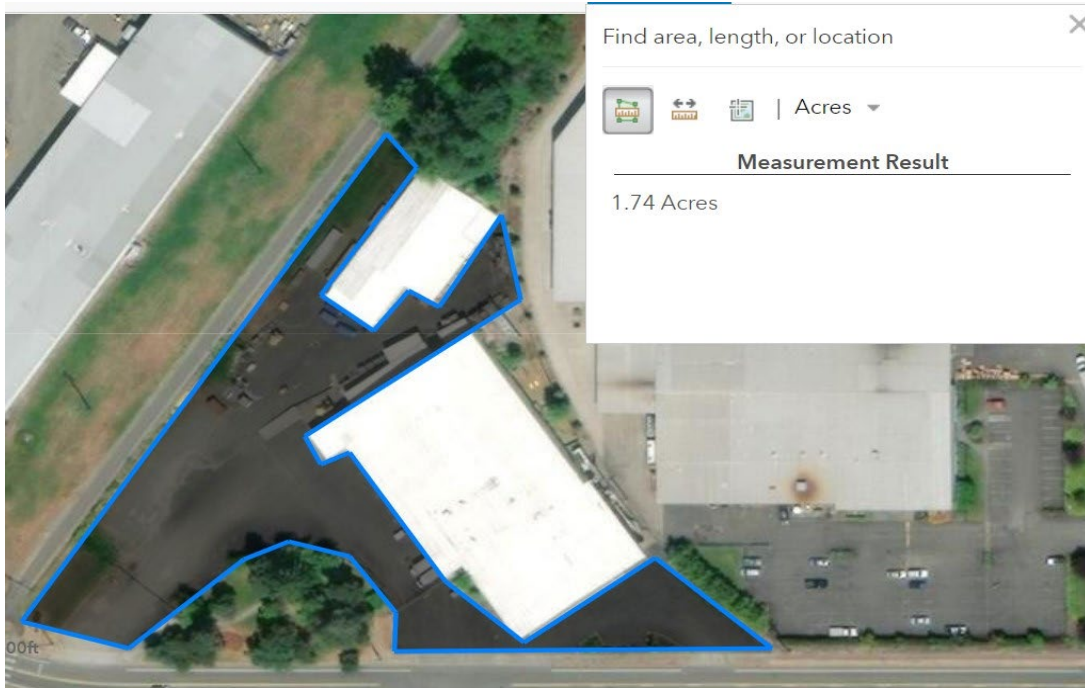


Figure 2: Imagery showing exposed portion of Facility at approximately 1.74 acres.

ATTACHMENT B

City of Enumclaw Comprehensive Stormwater Plan Imagery

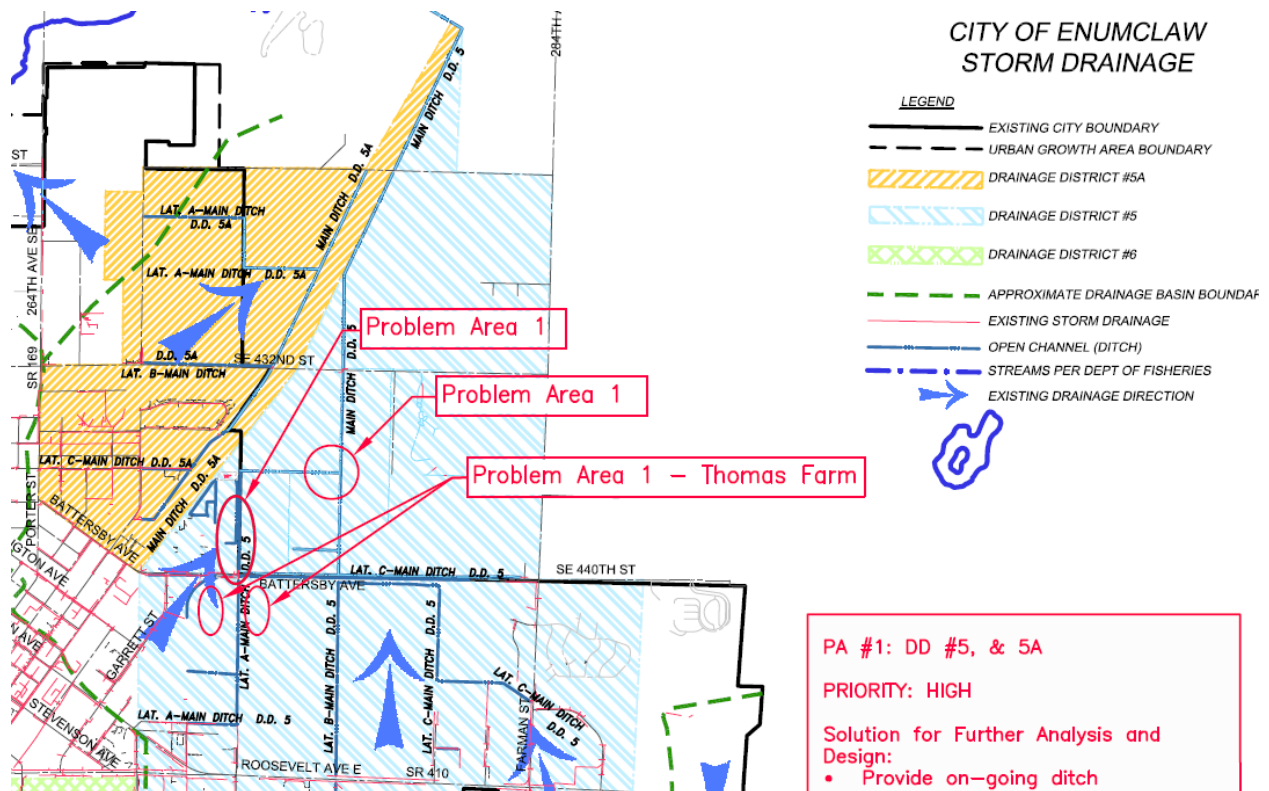


Figure 3: Image from pdf pg. 164 of city's Comprehensive Stormwater Plan. Stormwater from the Facility flows east and north, then north through Drainage District 5 to the Newaukum Creek.

ATTACHMENT C

Photograph Log

All photographs taken by Kyle Masters on May 12, 2023

Nikon Coolpix AW120

Photo Log – Hill AeroSystems



Photo: #01 (DSCN0583.JPG)

Description: In the covered, outside waste storage area, four 55-gallon drums of oil-based hydraulic fluid waiting disposal.



Photo: #02 (DSCN0584.JPG)

Description: In the covered, outside waste storage area, multiple containers of wastes waiting disposal. The rightmost, upright fiber drum was labeled "Sodium Hydroxide," and the leftmost black drum was labeled "Muriatic Acid."



Photo: #03 (DSCN0585.JPG)

Description: In the outside, covered waste storage area, one open 55-gallon drum labeled "QualiChem" with an open container on top holding an oily liquid and rags.



Photo: #04 (DSCN0586.JPG)

Description: In the outside, covered waste storage area, one clamshell-type container labeled "Hazardous Waste."



Photo: #05 (DSCN0587.JPG)

Description: In the outside, covered waste storage area, inside the clamshell-type container, one drum holding smaller containers of assorted coatings, with a second, empty, drum formerly holding solvent.



Photo: #06 (DSC0588.JPG)

Description: Overview photo of the outside, covered waste storage area. The intermediate bulk container (tote) in background held machining oil.



Photo: #07 (DSCN0589.JPG)

Description: In the outside, covered waste storage area, a flammables cabinet holding a variety of expired chemicals, including oils, and coatings.



Photo: #08 (DSCN0590.JPG)

Description: Facing east, by the covered waste storage area, a row of covered dumpsters holding various scrap metals. The additional roofing provides cover to dumpsters occasionally left open as they are filled routinely (partly visible in background).



Photo: #09 (DSCN0591.JPG)

Description: Next to the waste storage area, additional material storage. Our site contact told us the gray drum holds diesel.



Photo: #10 (DSC0592.JPG)

Description: In the covered waste storage area, similar to Photo 2, with clearer view of "Waste paint" drum left open; also, clearer view of muriatic acid label.



Photo: #11 (DSCN0593.JPG)

Description: Facing northeast, to the southwest of the waste storage area, a large open dumpster holding solid waste. Also visible on the paved surface in the foreground, a reddish fine substance like spent blast material or sand.



Photo: #12 (DSCN0594.JPG)

Description: Facing north, at the western edge of the Facility, machining supplies and equipment lying exposed.



Photo: #13 (DSCN0595.JPG)

Description: Facing north, by Facility's secondary building, photo of recently installed roof runoff treatment system.



Photo: #14 (DSC0596.JPG)

Description: Facing southwest, catch basin with cover and liner, and sock-type barrier to filter stormwater. It appeared to serve as main area catch basin



Photo: #15 (DSC0597.JPG)

Description: Cited to the northwest of catch basin in Photo 14, this raised catch basin receives water from it and serves as the main outfall and sampling point for discharge monitoring.



Photo: #16 (DSC0598.JPG)

Description: Between the two buildings, the container component of a box truck, or delivery truck, laying on the paved surface serving as an oil storage area. Note the large amount of spent absorbent pads next to the tank.



Photo: #17 (DSC0599.JPG)

Description: Facing northwest, additional outside machining supply storage.



Photo: #18 (DSC0600.JPG)

Description: Facing southwest, along Facility boundary, large generator rarely used.



Photo: #19 (DSC0601.JPG)

Description: Additional catch basin to the northeast of the main outfall, just northwest of the second building.



Photo: #20 (DSC0602.JPG)

Description: Overgrown area at north boundary, just northwest of second building. There appeared to be water draining to the north, off-site.