



STORMWATER POLLUTION PREVENTION PLAN

THE CITY OF TACOMA CENTRAL TREATMENT PLANT

2201 PORTLAND AVENUE

TACOMA, WASHINGTON 98421-2711

May 2025

NPDES ISWGP #WAR000711

Prepared by:

City of Tacoma – Environmental Services

STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2 or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐ Yes ☒ No

If Yes, Type of Corrective Action: ☐ Level 1 ☐ Level 2 ☐ Level 3*

Date SWPPP update/revision completed:

Briefly describe SWPPP Update (use back side, if necessary):

*Note: For Level 3 Corrective Actions, a qualified industrial stormwater professional must review the revised SWPPP, and sign and certify below, in accordance with Condition S8.D.2:

"The Permittee has made appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Based on my review of the SWPPP, discharges from the facility are reasonably expected to meet the ISGP benchmarks upon implementation."

Qualified Industrial Stormwater Professional's Printed Name

Title

Qualified Industrial Stormwater Professional's Signature

Date

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

City of Tacoma Central Treatment Plant Wastewater Operations & Maintenance Division Manager

By:
Name

Signed by:



903C264FF7714D9

Hugh Messer

Division Manager

05/15/2025

Date

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1 STORMWATER POLLUTION PREVENTION PLAN PURPOSE AND OBJECTIVES

The Washington State Department of Ecology (DOE) National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater General Permit (Permit), Section S3, requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall include:

- A site map, showing details pertinent to Stormwater Management
- A detailed Assessment of the Facility
- A detailed description of Stormwater BMPs
- A Sampling Plan

1.1 SWPPP REQUIREMENTS

1.1.1 Per Section S3.A of the Permit, the SWPPP shall specify Best Management Practices (BMPs) necessary to:

- Provide All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART) of stormwater pollution.
- Ensure the discharge does not cause or contribute to a violation of the Water Quality Standards.
- Comply with applicable federal technology-based treatment requirements under 40 CFR – 125.3.

1.1.2 BMPs shall be consistent with or demonstrably equivalent to the most recent revision to the 2024 Stormwater Management Manual for Western Washington.

1.1.3 The Central Treatment Plant (CTP) Wastewater Operations & Maintenance, Operations Section Assistant Division Manager will ensure the SWPPP is kept current and updated as necessary.

- The SWPPP shall be modified and updated to reflect current conditions or significant changes to the CTP, or the pollutants discharged from the CTP.
- Modifications to the SWPPP shall include additional or modified BMPs designed to correct problems identified.
- Modifications to correct deficiencies identified in writing by Ecology will be made within 30 days of notice.

1.1.4 Revisions or modifications to the SWPPP will be signed and certified in accordance with General Condition G2, S7, and S8 of the Permit.

1.2 SWPPP LOCATION AND PUBLIC ACCESS

1.2.1 The Central Treatment Plant Wastewater Operations & Maintenance Division, Operations Section Assistant Division Manager will maintain the Facility's Central Stormwater File. The file will include the General Permit, SWPPP, all forms completed in support of the SWPPP implementation, including inspection and spill

reports, and all correspondence with DOE. Additionally, other information relevant to the implementation of the SWPPP will be maintained in the file. These records will be maintained at least five years beyond the expiration of the General Permit.

1.2.2 As required by Section S9.G of the Permit, the SWPPP maintained at the Central Treatment Plant is immediately available upon request to the DOE, and upon written request, to the public within 14 days.

1.2.3 Where signatory requirements exist on the forms and documents cited above, they will be signed by the person who conducted the site inspection and the person of authority for the Facility. Additionally, the SWPPP Certification will be signed by the Division Manager.

2 FACILITY ASSESSMENT

2.1 SITE DESCRIPTION

2.1.1 General Site Layout and Facilities

The City of Tacoma Central Treatment Plant is a municipal plant and processes approximately 86% of the City's daily flow of residential and industrial sewage. The CTP includes liquid and solid stream processing including primary and High Purity Oxygen (HPO) secondary treatment, Dual-digestion, solids dewatering and production of class "A" bio-solids products.

The site is also the main location for storage and deployment of operation and maintenance equipment for the City of Tacoma owned stormwater and wastewater systems.

Stormwater within the site discharges to either the City of Tacoma stormwater system or the City of Tacoma wastewater system.

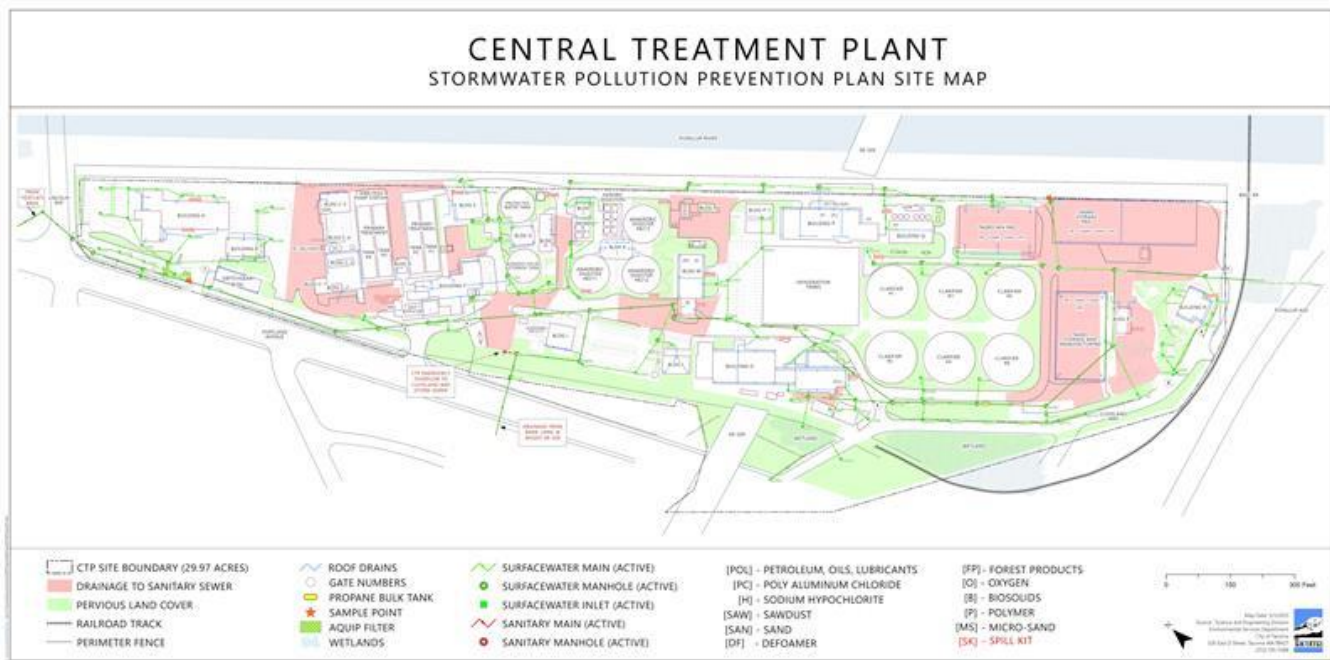
General Information

Owner Name	City of Tacoma
Facility Name	Central Treatment Plant
Facility Address	2201 Portland Avenue
Parcel Numbers	89500000330, 0320033031, 4715010020, 4715010030, 4715010060, 4715010151, 4715010110, 4715010170, 4715010210
Business Hours	24 hours/day; 365 days/year

Facility Phone Number	253-591-5595
Facility NAICS Group	221320 – Sewage Treatment Facilities
Primary Industrial Activity	Wastewater Treatment – Publicly Owned Treatment Works
Primary Land Use Designation	Industrial

2.1.2 Stormwater System Description

Central Treatment Plant's stormwater drainage basins are separated into basins that drain into the wastewater system and basins that are connected to the stormwater system. Stormwater enters a 30" stormwater system that runs through the CTP property. The 30" stormwater line discharges south of the CTP to the Cleveland Way Pump Station, which in turn discharges stormwater from east-central Tacoma to the Puyallup River. SWPPP Site Map pictured below **Appendix B**.



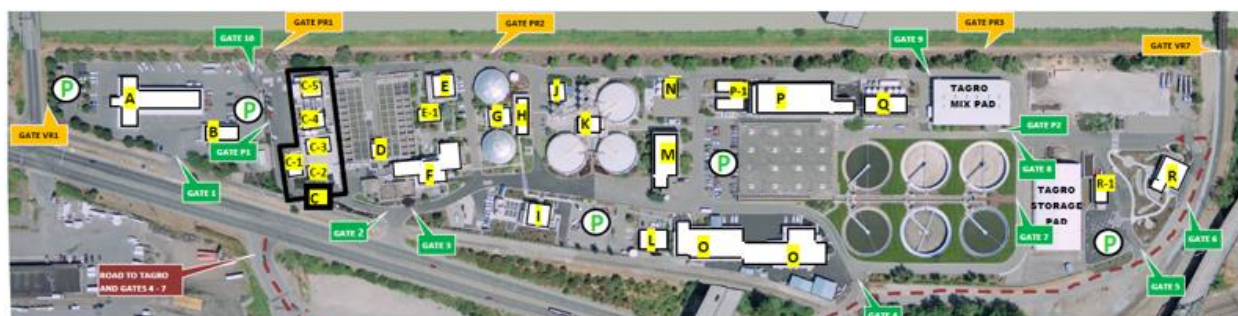
2.2 Key Locations Map

2201 EAST PORTLAND AVENUE
TACOMA, WA 98421

OPERATIONS DESK 24HR PHONE
(253) 591-5595

KEY LOCATIONS MAP

CENTRAL WASTEWATER TREATMENT PLANT



BUILDINGS KEY	ACTIVE GATES	RESTRICTED ACCESS GATES	LEGEND KEY
A TRANSMISSION MAINTENANCE B CUSTOMER SERVICE BLDG C PEAK WET WEATHER COMPLEX C-1 GRIT WASHER BLDG C-2 GRIT BLOWER BLDG C-3 GRIT/PWW ELECTRICAL BLDG C-4 PWW HYDROCYCLONE BLDG C-5 PWW EFFLUENT PUMP STATION D OPERATIONS BREAKROOM E OLD S&E BLDG F OLD LABORATORY TRAILER G OPERATIONS CENTER H OLD DIGESTOR BLDG I NEW INFLUENT PUMP STATION J FACILITIES SERVICES BLDG K DIGESTOR EQUIPMENT BLDG L OLD GAS UTILIZATION FACILITY M SOLIDS DEWATERING (BFP) N DISINFECTION BLDG O PLANT MAINTENANCE BLDG P SECONDARY TREATMENT BLDG P-1 OLD ENGINEERING ANNEX Q OXYGEN GENERATION BLDG R TAGRO VISITOR'S CENTER R-1 TAGRO STORAGE	GATE 1 - IN/OUT ACCESS GATE 2 - EXIT ONLY FROM THE PROCESS AREA GATE 3 - IN/OUT ACCESS, MAIN PLANT ENTRANCE GATE 4 - IN/OUT ACCESS GATE 5 - EXIT ONLY GATE 6 - IN ONLY, MAIN TAGRO ENTRANCE GATE 7 - //PLANNED//EXIT ONLY GATE GATE 8 - //PLANNED//EXIT ONLY FROM PROCESS AREA GATE 9 - //PLANNED//ALLOWS 2-WAY PASSAGE GATE 10 - //PLANNED//IN/OUT ACCESS GATE P1 - //PLANNED//PEDESTRIAN IN/OUT ACCESS GATE P2 - //PLANNED//PEDESTRIAN IN/OUT ACCESS	GATE VR1 - VEHICLE RESTRICTED ACCESS GATE VR2 - VEHICLE RESTRICTED ACCESS GATE PR3 - PEDESTRIAN RESTRICTED ACCESS GATE PR4 - PEDESTRIAN RESTRICTED ACCESS GATE PR5 - PEDESTRIAN RESTRICTED ACCESS	BUILDING LOCATIONS VISITOR PARKING ROAD TO TAGRO RESTRICTED ACCESS GATES ACTIVE GATES

2.2 INDUSTRIAL ACTIVITIES AND EQUIPMENT

The following are activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater. Areas where these activities may occur are shown on the Key Location Map (above) **Appendix A**.

2.2.1 Loading and unloading of dry bulk materials or liquids

- Dewatered biosolids cake from the Solids Dewatering process is loaded into roll-off box containers at the Solids Dewatering building, for transport to the TAGRO mixing area.
- Vendor-delivered sand, sawdust, and aged bark (Forest Products) are each offloaded under cover within the TAGRO mixing area. All catch basins in the TAGRO mixing area drain to sanitary sewer.
- Seasonal load-out of TAGRO products are stored within a post-frame structure.
- Liquid Sodium Hypochlorite is offloaded into two (2) separate storage tanks at the disinfection pump building inside a containment area with a drain to sanitary sewer.
- Liquid Oxygen (LOX) is offloaded to the storage tank outside the PSA building, on the dike road.
- Assorted dry polymers are offloaded to the DAFT and Solids Dewatering process areas

and stored inside their respective areas building.

- Limited quantities of Petroleum, Oil, and Lubricants (POL) materials, usually in containers of 50 gallons or less, are offloaded at the maintenance warehouse.
- LPG is offloaded to the bulk storage tank near gate 4. This is used for fueling forklifts.
- Storage tanks for Ferric Chloride and 25% Sodium Hydroxide (Caustic) are located in the Peak Wet Weather (PWW) facilities and are no longer used at the Facility. In 2014, sodium hydroxide was eliminated from the Facility. In 2015, ferric chloride was eliminated from the Facility. The Ferric Chloride has been replaced with Polyaluminum Chloride. The tanks reside in a containment area which includes a raised and walled berm and drainage sump, which the trucks park over while offloading. The drains within the containment area are monitored by level control. The stormwater that accumulates in the area is periodically drained to the wastewater treatment Facility.
- Microsand for use in the Peak Wet Weather (PWW) facilities is shipped and offloaded on pallets, then stored under cover in the old grit dumpster building and in the PWW hydrocyclone building.
- The main Septage Receiving Station is located off-site. The existing Facility on-site is at the plant headworks and is made available as necessary or when the off-site system requires preventative or corrective maintenance.

2.2.2 Outdoor storage of materials or products

- There are no uncovered storage areas for products or material.

2.2.3 Outdoors manufacturing and processing

- There is no uncovered outdoor manufacturing or processing.

2.2.4 Onsite Dust or particulate generating processes

- The TAGRO mixing process generates sawdust particulates. These are contained for the most part by using netting to surround the process area on 3 sides.
- Operations within the maintenance shop that generate particulates and dust are mitigated by vacuum pick-up systems.

2.2.5 On-site waste treatment, storage, or disposal

- All on-site waste storage and treatment is contained within appropriate structures and includes infrastructure to safeguard against stormwater pollution.

2.2.6 Vehicle and equipment fueling, maintenance and/or cleaning (includes washing)

- Some truck and equipment washing occurs in the TAGRO area of the Plant, in an area that drains to the sanitary sewer. Vehicle and equipment maintenance is done off-site by our Fleet Maintenance Division of the City, except for the heavy equipment that is serviced on site by mobile support technicians. Most vehicles are washed offsite. During limited times equipment is washed by operation staff between the sedimentation tanks. This area drains to sanitary sewer.

- Diesel refueling is completed by a mobile vendor, PetroCard. The other fueling operations are limited quantities required for small engines such as pressure washers; this is done with 5-gallon cans. Refueling of forklift LPG tanks occurs at the Bulk LPG tank near Gate 4.

2.2.7 Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area

- The Solids Dewatering building has an air scrubber that vents over the roof of the facilities.
- The DAFT area located in the Secondary building has an air scrubber that vents over the roof of the facilities.

2.2.8 Roofs or other surfaces composed of materials that may be mobilized by stormwater (e.g., galvanized roofs, galvanized fencing)

- Galvanized railings are located throughout the site as fall protection.
- Galvanized fencing surrounds the site.
- Galvanized ducting for air handling units are located across the facilities building roofs.
- Galvanized metal roofing exists on building A over the garages. The other office building side of building A is coated with an Acrylic-Coated Galvalume called Snap-Loc 24 and is made by metal sales manufacturing corporation.

2.3 INVENTORY OF MATERIALS

Table 2-1 lists categories of materials that have potential to be present in stormwater discharges, if not otherwise controlled. An available operator is used at each of the off-load sites to monitor vendor activities and to respond to any conditions that might result from their activities. Where available, the Senior Operator in the main control room will monitor the vendor's activities on the camera system.

Table 2-1 Material List

Industrial Activity	Materials	Potentially present in Stormwater if adequate controls do not exist.
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<i>Operations</i>	<i>Dry Polymer</i>	<i>Polymers are delivered dry in bags on pallets. The material is stored and used within two buildings. The major use is in the Solids Dewatering Facility for biosolids dewatering. The second use is in the Secondary building for the DAF thickeners. Exposure is not likely in normal conditions.</i>
<i>Operations</i>	<i>Sodium Hypochlorite</i>	<i>Liquid sodium hypochlorite is delivered in 4800-gallon loads and offloaded into two 10,300-gallon storage tanks. A containment area drains to the sanitary sewer. Exposure is not likely in normal conditions. There is also a 220 gallon day tank with double wall construction for containment.</i>
<i>Operations</i>	<i>Liquid Oxygen (LOX)</i>	<i>Liquid oxygen is delivered in bulk from tanker trucks. The liquid oxygen is stored outside the PSA building in a steel pressure tank. Liquid oxygen is very volatile at atmospheric pressure and turns into a gas if spilled. Exposure is not likely in normal conditions.</i>
<i>Operations and Maintenance</i>	<i>Liquid Petroleum Gas</i>	<i>Canisters for the Forklifts are filled from the LPG bulk tank near the southwest corner of the Facility near the final clarifiers. Exposure is not likely in normal conditions.</i>
<i>Maintenance</i>	<i>Solvents and Lubricants</i>	<i>Small quantities are delivered in cans, drums or tubes and are stored in a covered containment by the maintenance building. Exposure is not likely in normal conditions.</i>
<i>Operations</i>	<i>Septage</i>	<i>Septage is received at two dump stations connected to the sanitary sewer. One station is located at the plant headworks and the other is located off-site. The off-site station is the primary location. The station on-site is only used in the event the off-site location is unavailable or as necessary. Exposure is not</i>

		<i>likely in normal conditions.</i>
<i>TAGRO</i>	<i>TAGRO Components</i>	<i>TAGRO blends use Class “A” biosolids, sand, sawdust, and bark. The blending process and product storage is contained under a roof structure and all area catch basins go to the sanitary sewer. Exposure is not likely in normal conditions.</i>
<i>Operations</i>	<i>Polyaluminum Chloride (PAC)</i>	<i>Liquid PAC is stored at the Peak Wet Weather Facility (PWW) (15k gallons). This tank resides in a containment area which includes a raised and walled berm and drainage sump which the truck parks over while offloading. The containment area level is monitored. The stormwater that accumulates in the containment area is periodically drained to the wastewater treatment Facility. PAC is also stored in the DAFT polymer room of the Secondary building (2 @ 5k gallons). Exposure is not likely in normal conditions.</i>
<i>Operations</i>	<i>Microsand</i>	<i>Microsand for use in the PWW Facility is stored under cover in Building F by Gate 2. Exposure is not likely in normal conditions.</i>
<i>Operations</i>	<i>Defoamer</i>	<i>Liquid defoam concentrate is stored in 50-gallon drums in the PWW effluent pump room and on the first floor of the Solids Dewatering building. There is also a 50-gallon drum of diluted (1:10) defoam located on the second floor of the dewatering building on a dolly. Exposure is not likely in normal conditions.</i>

3 STORMWATER BEST MANAGEMENT PRACTICES

This section describes the Stormwater Best Management Practices (BMPs) from the Washington State

Department of Ecology Stormwater Management Manual for Western Washington that are appropriate for this Facility. Many of the management practices included in this plan are routinely employed by the Facility; others are based on BMPs that have been used to reduce pollutant loads elsewhere and modified to suit the specific needs of this Facility.

3.1 OPERATIONAL SOURCE CONTROL BMPS

The Central Treatment Plant is comprised of five main work groups: Sewer Transmission, Plant Operations, Plant & Pump Station Maintenance, Business Operations Environmental Compliance, and TAGRO. These sections share the responsibility to ensure the Plant is implementing its Stormwater Pollution Prevention Plan and operating in compliance with its NPDES Industrial Stormwater General Permit.

The following Best Management Practices from Volume IV of the Washington State Department of Ecology Stormwater Management Manual for Western Washington apply to this site. The City intends to follow all applicable sections of each BMP and the recommended portions when applicable. The Site Map ([Appendix A](#)) provides locations where there is potential for pollutants and appropriate BMPs will be applied to those areas as necessary.

3.1.1 Applicable Operational Source Control BMPs from 2024 Stormwater Management Manual for Western Washington, Vol. IV-1

3.1.1.1 Pollution Prevention Team (BMP S101)

The Operations & Maintenance, Operations Section, Assistant Division Manager (ADM) is responsible for stormwater pollution prevention activities at the Facility. The ADM's role as lead and coordinator of the Pollution Prevention Team is to conduct or assign responsibility to implement the stormwater pollution prevention activities identified in the SWPPP, which include the following:

- Develop, maintain, implement, and modify the SWPPP as required.
- Hold periodic meetings to review Facility BMPs.
- Assign the performance of inspections and monitoring, including sampling, as required.
- Supervise SWPPP changes to minimize pollutant exposure to stormwater.
- Assign or perform communication with regulatory agencies as needed.
- Supervise training for SWPPP activities, including spill cleanup.
- Assure records are maintained on-site reports are submitted to DOE.
- Complete the annual SWPPP review.
- Obtain adequate resources to complete the activities and programs identified in the SWPPP.

The remaining members of the Pollution Prevention Team are responsible for understanding and implementing the requirements of the SWPPP in their work areas, including spill response. As members of the Pollution Prevention Team, they will receive SWPPP training. They may assist the Operations & Maintenance, Operations Section, Assistant Division Manager and may assume stormwater pollution prevention responsibilities as assigned by the Operations & Maintenance Assistant Division Manager.

Additionally, Facility employees who have duties in activities subject to the General Permit will

participate in implementing the activities discussed in this Plan through training, careful attention to safe environmental practices, and a constant focus on preventive measures.

Table 3-1 Pollution Prevention Team

Name	Division	Office Phone	After Hours Phone
Kirk Elliott	Operations & Maintenance Operations Section, Assistant Division Manager	253-404-6922	253-591-5595
Aaron Pinkston	Operations & Maintenance, Operations Section, Operations Supervisor	253-404-6983	253-591-5595
Virginia Shaver	Operations & Maintenance, Operations Section, Operations Supervisor	253-404-6998	253-591-5595
Matt Symington	Operations & Maintenance, Operations Section, Operations Supervisor	253-404-6938	253-591-5595
Heidi Fitzgerald	Operations & Maintenance, Operations Section, WWTP Operator Senior	253-404-6963	253-591-5595
Klinton Caillier	Operations & Maintenance, Operations Section, WWTP Operator Senior	253-404-6952	253-591-5595
Michelle Hsia	Operations & Maintenance, Operations Section, WWTP Operator Senior	253-502-2159	253-591-5595
Cassandra Moore	Business Operations, Environmental Compliance Assistant Division Manager	253-502-2237	253-502-2222
Kevin Brennan	Business Operations, Environmental Compliance Regulatory Compliance Analyst, Principal	253-502-2204	253-502-2222

3.1.1.2 Housekeeping BMP S102

- a. Vacuum street sweeper runs through the plant monthly and can occur more frequently upon request or for spill cleanup response. SAP maintenance plan #22511.
- b. Dust can form at the TAGRO mixing pad and TAGRO storage pad. Fine mesh surrounds the area to capture dust while mixing processes occur. All these areas are covered. Fugitive dust is cleaned up regularly.

- c. Bag houses omitted due to none at industrial Facility.
- d. All dumpsters have storm resistant covers and remain closed when not in use.
- e. Any unmounted new or used tires utilized at the CTP are stored indoors and shall be deployed only in areas which drain to the sanitary sewer.

3.1.1.3 Preventative Maintenance BMP S102

- a. Stormwater facility assessment for catch basin cleaning trigger (sediment 60% sump depth/6" below outlet) occurs during the monthly plant stormwater inspection. See Appendix D for SWPPP Inspection form. The monthly workorder is generated by SAP under maintenance plan #31907.
- b. Aquip passive adsorptive depth filtration technology stormwater treatment equipment near building A is maintained in accordance with maintenance plan #42252 stored in SAP. Bi-annual stormwater conveyance line cleaning is scheduled by a work order generated by SAP under maintenance plan #43236.
- c. Monthly equipment/vehicle leak inspections occur during the monthly plant stormwater inspection. See Appendix D for SWPPP Inspection form. The monthly work order is generated by SAP under maintenance plan #31907. Dumpsters are inspected annually for holes, defects, and leakage. The annual work order is generated by SAP under maintenance plan #43332.
- d. Spills and leaks are immediately cleaned up upon discovery by Facility staff. Sixteen spill kits are located throughout the property. See Appendix C for locations shown on the Spill Response Kit Map. Spill kits are checked monthly per work order generated by SAP under maintenance plan #31908. Storm water supplies are checked monthly per SAP work order under maintenance plan #31909. Operations staff and Transmission staff utilize vacuum sweepers for bulk cleanup of paved areas.

3.1.1.4 Spill Prevention and Emergency Cleanup Plan (SPEC) BMP S104

The City of Tacoma Environmental Services Central Treatment Plant Emergency Response & Evacuation Plan includes the Chemical Spill Emergency Response and General Guidelines required for the SPEC.

- a. All storage of hazardous substances is in containment sized 10% of total tank volume or 110% of volume of largest tank, whichever is greater.
- b. Precipitation accumulating in uncovered containment areas is pumped or drained to the sanitary sewer. A visual inspection for the presence of contaminants is conducted prior to draining the containment.
- c. There are sixteen Spill Kits located throughout the property. Spill Kit locations can be found on the Spill Response Kit Map in **Appendix C**. The contents of the kits include materials capable of absorbing 15 gallons of fuel, a storm drain cover kit, non-water 10-foot containment boom with a 12-gallon absorbent capacity, shovel, and two 5-gallon buckets with lids.
- d. Forklift propane cylinder fueling SOP-CTP-0000-01 Propane Tank Filling SOP can be found in the Environmental Services Electronic Documentation System (EDS)

- e. Storm drains are blocked or covered near runoff locations when equipment fueling occurs.
 - f. Fuel transfer operations are maintained by a mobile fueling company PetroCard. The logistics coordinator is Jim Gregory. Contact information is 1-800-950-3835.
 - g. Material & equipment storage and activities occur in or use containment for leaks.
 - h. Drip pans or absorbents are used under leaky equipment, or the equipment is stored indoors. Fluids are drained from equipment prior to on-site storage or disposal.
 - i. A spill log is maintained by the City of Tacoma Source Control Department for any spill larger than a liter or spills that may lead to pollutants entering the stormwater system and not cleanable by operation staff or is outside of normal day to day cleaning activities.
1. Spill Response: In the event of a spill, immediate action must be taken to contain and remediate the spilled material. All significant spills must be immediately reported to the Operations Assistant Division Manager (253-502-2188) and Environmental Services/Environmental Compliance (253-502-2222). Environmental Compliance will document the incident in its Incident Intake Information database on City of Tacoma's GIS database in accordance with the NPDES Permit noting the date, time, amount, location, and reason for spill; date/time cleanup is completed, notifications made, and staff involved. The Operations Assistant Division Manager will keep records of spills with the SWPPP.
 2. Formal Spill Reporting: According to Washington State law, all hazardous material and oil spills must be reported immediately by the spiller. The Operations Assistant Division Manager, or their designee, will report spills to the Department of Ecology's Southwest Regional Office, 360-407-6300 and the National Response Center 1-800-424-8802. As noted above, all significant spills will be reported to Environmental Services/Environmental Compliance (253-502-2222).
 3. Spill Response Contractors: Significant spills may require the use of a professional contractor. Provider used for City spill response has been Clean Harbors Environmental Services 1-800-645-8265. Environmental Services/Environmental Compliance has experience with other types of contractors and may provide valuable assistance.
 4. Post-Incident Review: Significant spills, or spills released to the environment, must be followed up with a post-incident review consisting of Operations, Environmental Compliance.

3.1.1.5 Employee Training Plan BMP S105

Training: Staff from each section receive site-specific Stormwater Pollution Prevention Plan training on an annual basis. The training is a mandatory requirement of the Industrial NPDES Stormwater Permit. Training includes an overview of the content of the SWPPP, guidance on how Facility staff working at the CTP can play a significant role in preventing stormwater contamination, spill response procedures, and general housekeeping/maintenance requirements. Training is developed by members of the Operations and Business Operations work groups and is presented online through City of Tacoma's training platform Docebo. The training covers the following topics:

- What is a SWPPP and why a SWPPP is required.

- How employees make a difference in complying with the SWPPP and preventing contamination of stormwater.
- Good housekeeping practices.
- Preventative maintenance requirements.
- Materials management practices.
- Spill response procedures.

A copy of the attendee list will be kept by the Docebo Learning Management System.

3.1.1.6 Inspections BMP S106

Inspections: CTP personnel perform the required monthly physical plant inspection per the NPDES Permit. Inspections typically include observation and assessment of all stormwater facilities, and overall housekeeping of equipment and material storage areas. The inspection form will describe any required corrective actions that may be necessary and confirm if past corrective actions have been completed. See [Appendix D](#) for SWPPP Inspection form. The monthly work order is generated by SAP under maintenance plan #31907. Spill kits are checked monthly for readiness per work order generated by SAP under maintenance plan #31908. Dumpsters are inspected annually for holes, defects, and leakage. The annual work order is generated by SAP under maintenance plan #43332.

3.1.1.7 Recordkeeping BMP S107

The monthly inspection reports are submitted to the Operations and Maintenance Division Manager for signature and assignment of any corrective actions to the appropriate responsible work group at the CTP. Inspection reports are kept with the SWPPP for a minimum of 5 years.

3.1.1.8 Correcting Illicit Discharges BMP S108

The Illicit Discharge Detection and Elimination (IDDE) is an ongoing program designed to identify, prevent, detect, characterize, trace, and eliminate illicit discharges or connections to the City's stormwater conveyance system. Illicit Discharge training is conducted online, through the City of Tacoma employee training platform Docebo. All City of Tacoma employees are encouraged to look out for potential sources of pollution that may become Illicit Discharge and eliminate them per the City's Storm Water Management Manual.

3.1.2 Selected Source Control BMPs from 2024 Stormwater Management Manual for Western Washington, Vol. IV

Property/Site Type or Activity Type	Potential Pollutant(s) Associated with Activity or Pollutant that BMP is being used for.	BMP Reference Number From SWMMWW vol. IV	How and Where Implemented
IV-1 Source Control BMPs: Applicable to ALL sites			
All industrial sites.	All potential pollutants	BMP S101: Formation of a Pollution Prevention Team	Site-Wide as Needed. Described above.
All industrial sites.	All potential pollutants	BMP S102: Preventative Maintenance/Good Housekeeping	Site-Wide as Needed. Described above
All industrial sites.	Fuel leaks and spills, oils, powders, organics, heavy metals, salts, acids, alkalis.	BMP S104: Spill Prevention and Cleanup	Site-Wide as Needed. Described above
All industrial sites.	All potential pollutants	BMP S105: Employee Training	Site-Wide as Needed. Described above
All industrial sites.	All potential pollutants	BMP S106: Inspections	Site-Wide as Needed. Described above
All industrial sites.	All potential pollutants	BMP S107: Record Keeping	Site-Wide as Needed. Described above
All industrial sites.	Wastewater, process water.	BMP S108: Correcting Illicit Discharges	Site-Wide as Needed. Described above
IV-2 Cleaning and Washing Source Control BMPs			
Outdoor washing of any kind and/or where washing activities may come into contact with precipitation or stormwater.	Toxic hydrocarbons, organic compounds, oils and greases, nutrients, heavy metals, pH, suspended solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD), soaps, detergents, soluble organics.	BMP S431: Washing and Steam Cleaning Vehicles/ Equipment/ Building Structures	TAGRO parking lot and between Sed tanks or within sanitary sewer drainage basins. All process water shall drain to sanitary sewer.
Flushing of any potable water sources where flushing activities may come into contact with precipitation or stormwater.	Chlorine residual.	BMP S441: Potable Waterline Flushing, Water Tank Maintenance, and Hydrant Testing.	Site-Wide as Needed. Byproduct of line flushing shall be directed to sanitary sewer.
IV-3 Roads, Ditches, and Parking Lot Source Control BMPs			

Deicing and anti-icing products or walkways may come into contact with precipitation or stormwater.	Deicing and anti-icing materials.	BMP S406: Streets and Highways	Site-Wide as Needed. Store deicing materials indoors, Use least harmful materials.
Maintenance and cleaning of debris, sediments, and other pollutants from stormwater collection, conveyance, and treatment systems to maintain proper operation.	Excess sediment, oils, and hydrocarbons, debris, heavy metals, sediments, and contaminated water.	BMP S417: Maintenance of Stormwater Drainage Systems and Stormwater Management BMPs	Site-Wide as Needed. Inspect, clean, repair and improve facilities as necessary. Label Stormwater inlets.
All properties where vehicles can park.	Toxic hydrocarbons, organic compounds, oil and grease, metals, and suspended solids.	BMP S421: Parking and Storage of Vehicles and Equipment	Parking areas Site-Wide. Sweep parking areas regularly. Clean drips and spills immediately, use drip pans for leaking vehicles.
Street sweeping of urban roadways to minimize the contamination of stormwater.	Vegetative debris, paper, fine dust, vehicle liquids, tire and brake wear residues, heavy metals, soil particles, ice control salts, domestic wastes, lawn chemicals, and vehicle combustion products.	BMP S430: Urban Streets	Paved areas Site-Wide. Sweep plant road surfaces regularly with high efficiency sweepers. Keep debris out of storm drains.
IV-4 Soil Erosion, Sediment Control, and Landscaping Source Control BMPs			
Manufacturing generated Particulate material that causes air emissions and can contaminate stormwater.	Dust	BMP S408: Dust Control at Manufacturing Areas	TAGRO mixing and storage pad. Prevent/contain dust. Clean up fugitive dust regularly, direct dust contaminated runoff to treatment.
Properties and areas in the Facility that have landscaping or lawn areas.	Toxic organic compounds, heavy metals, oils, total suspended solids, coliform bacteria, fertilizers, and pesticides.	BMP S411: Landscaping and Lawn/Vegetation Management	Pervious and Landscaped areas Site-Wide. Use appropriate vegetation and integrated management practices. Mulch.
Properties whose topography or operations may cause erosion.	Soil and Sediment	BMP S425: Soil Erosion and Sediment Control at Industrial Sites	Steep grade along Portland Ave. Cover exposed soil with appropriate vegetation,

			mulch. Infiltrate stormwater.
Properties that may require the use of pesticides.	Pesticides	BMP S435: Pesticides and an Integrated Pest Management Program	Site-Wide as Needed. Employ licensed pesticide applicators, use integrated management practices.
Storage of Fertilizers and Dry Pesticides used by grounds maintenance.	Fertilizers and Pesticides	BMP S444: Storage of Dry Pesticides and Fertilizers	Between building Q and TAGRO mixing pad. Store all landscaping chemicals indoors and in the appropriate containment. Clean up spills.
Landscape irrigation that can lead to discharges of contaminated water runoff into drainage systems.	Chlorinated water, sediments, nutrients.	BMP S450: Irrigation	Landscaped areas Site-Wide. Maintain irrigation systems for appropriate water application.

IV-5 Storage and Stockpiling Source Control BMPs

Outside storage of liquid, food waste, or dangerous waste containers and/or where storage may come into contact with precipitation or stormwater.	Oil and grease, acid/alkali, pH, BOD, metals	BMP S427: Storage of Liquid, Food Waste, or Dangerous Waste Containers	Behind building O. Store all containers under cover with appropriate containment, labels and secure lids. Clean up spills.
Outside storage of liquids in above-ground tanks and/or where storage may come into contact with precipitation or stormwater.	Oil and grease, organics, acid/alkali, heavy metals	BMP S428: Storage of Liquids in Permanent Aboveground Tanks	North side of sedimentation tanks, Building N, C-3. Utilize and maintain appropriate size secondary containment, drain to sanitary treatment.
Outside storage or transfer of solid raw materials, by-products or finished products and/or where storage may come into contact with precipitation or stormwater.	Leachate, erosion, total suspended solids, BOD, organics, dissolved salts	BMP S429: Storage or Transfer (Outside) of Solids Raw Materials, Byproducts, or Finished Products	TAGRO storage pad and mixing pad, Building M and I. Entire TAGRO area drains to sanitary sewer. All storage under cover, Sweep area regularly.

IV-6 Transfer of Liquid or Solid Materials Source Control BMPs

Filling portable propane tanks.	Propane	BMP S409: Fueling at Dedicated Stations	Bulk propane storage tank and filling station. Train employees on
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			propane fuel dispensing. Clean up leaks from vehicles at fueling station.
Loading/Unloading of liquid and solid materials at industrial facilities at shipping and receiving, outside storage, and fueling areas.	Liquid oxygen, propane, sodium hypochlorite, poly aluminum chloride, dry polymer, Acti-sand, biosolids, sawdust, liquid and solid materials.	BMP S412: Loading and Unloading Areas for Liquid or Solid Material	Multiple locations on site (see site map). Sweep areas regularly. Use drip pans or containment under leaking equipment. Drain areas to sanitary sewer.
Mobile fueling by fleet fueling and portable fuel tank.	Diesel	BMP S419: Mobile Fueling of Vehicles and Equipment	Site-Wide as Needed. Ensure Fuel vendors follow applicable BMPs. Perform fueling in areas that drain to Sanitary sewer.
Immediate cleanup of spills by use of spill response kits available to cleanup any roadway spills.	Fuel leaks and spills, oils, powders, organics, heavy metals, salts, acids, alkalis.	BMP S426: Spills of Oil and Hazardous Substances	Labeling on <u>Appendix C</u> Spill Response Kit Map. Train employees in Spill response and clean-up techniques. Develop and keep SPECP up to date.
IV-7 Other Source Control BMPS			
All mobile vehicle maintenance at Facility.	Toxic hydrocarbons, toxic organic compounds, oil and grease, pH, heavy metals.	BMP S414: Maintenance and Repair of Vehicles and Equipment	Building A, O. Maintain vehicles indoors, inspect vehicles and equipment for leaks, convey process water to sanitary treatment.
Sites with outside manufacturing and processing.	Pollutant sources outside process areas, stack emissions, and areas where manufacturing activity has taken place.	BMP S418: Manufacturing Outdoors	TAGRO storage pad, mixing pad, Building M. Cover and contain outdoor manufacturing and processing.
Sites with painting and sanding operations that may be exposed to precipitation and runoff	Paints, finishes, and coating.	BMP S420: Painting /Finishing/ Coating of Vehicles/Boats/Building Equipment	Site-wide as Needed. Clean up spills. Sweep paved areas regularly. Drain surrounding area to sanitary treatment.

Industrial Sites with Roofs.	Metals, solvents, acidic/alkaline pH, BOD, organics.	BMP S424: Roof /Building Drains at Manufacturing and Commercial Buildings	Site-wide as Needed. Determine if contaminants come from the roof. Treat runoff contaminated with pollutants.
Sites with stormwater conveyance structures	Wastes from roads and industrial areas.	BMP S442: Labeling Storm Drain Inlets on Your Property	Site-wide. Attach storm drain signs that are highly visible placed directly atop or adjacent to storm drain inlets.
Sites with landscaping	Phosphorous, nitrogen, and coliform bacteria.	BMP S443: Fertilizer Application	Site-wide as Needed. Time application of appropriate fertilizers. Clean fertilizer off impervious surfaces.
Sites with processes that vent emissions to the roof and/or that may accumulate pollutants on the roofs.	Hydrocarbons, fines, solvents, and metal dust.	BMP S447: Roof Vents	Building F, M, P, O, L, Q. Utilize vent covers, drip pans, Treat runoff contaminated with pollutants.
Activities associated with the construction of buildings and other structures, remodeling, and general exterior repair work.	Toxic organics, suspended solids, heavy metals, asbestos, pH, oils, PCBs, grease	BMP S451: Building Repair, Remodel, Paint, Construction	Site-wide as Needed. Do not allow pollution source materials to contact precipitation or runoff. Direct any process water to sanitary treatment.
Sites with transient geese	Goose feces containing pathogens and parasites	BMP S452: Goose Waste	Site-wide as Needed. Clean up goose waste from depositing near water or in water that can contribute to nutrients and algae growth

3.2 STRUCTURAL SOURCE CONTROL BMPs

- 3.2.1** The City of Tacoma uses grading, berms, and curbing to prevent runoff of contaminated flows and diverts run-on away from these areas. All cleaning operations indoors, under cover, or in bermed areas prevent stormwater runoff and run-on, also that capture any overspray. All wash water drains to a collection system that directs the wash water to sanitary sewer lines within the treatment plant.
- 3.2.2** The included areas have coverings over storage, equipment, and processes: TAGRO storage pad, TAGRO mixing pad, and the west side of TAGRO mixing pad (boneyard).

The included areas have containment: Disinfection storage tanks (Building N), Coagulant storage tanks (Building C-4), GUF media drying bed (Between Building I and L)

3.3 TREATMENT BMPS

- 3.3.1** The City of Tacoma uses an Aquip treatment BMP to provide passive adsorptive depth filtration technology to stormwater. This will remove pollutants such as suspended solids, turbidity, heavy metals (including dissolved metals), organics (e.g. volatile hydrocarbons, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs)), and nutrients (e.g. nitrogen and phosphorus). Targeted metals include copper, zinc, iron, lead, aluminum, nickel, and cadmium. The company who created this system is Newterra StormwaterRx. This drainage/treatment Facility is near building A is maintained in accordance with our maintenance plan stored in SAP. See section 3.1.1.3 for more information.

4 SAMPLING PLAN

- 4.1** Storm water sampling is done in accordance with the Industrial Stormwater General Permit and its instructions for documentation are in the Stormwater sampling at Tacoma CTP SOP attached under **Appendix F**. Staff responsible for sampling are trained in the SOP and are a part of the pollution prevention team (Table 3-1).
- 4.2** Specifics on laboratory analysis can be found under **Appendix G**. Sampling results are reported to the Washington State Department of Ecology. Example of Discharge Monitoring Report (DMR) attached under **Appendix H**.
- 4.3** The two sample locations are TNK-0312 and MH 6763612 as identified on **Appendix B** Stormwater Pollution Prevention Plan Site Map. Location of discharge points not sampled per S3.B.5.b.i are the 15 other stormwater outfalls seen in **Appendix I**. These outfalls are not sampled because the activities that occur in these small basins are substantially similar to the larger drainage basins captured at TNK-0312 and MH 6763612 (MH 57). The majority of industrial activity at the site takes place in the large basins that are sampled. In the smaller basins not sampled the primary use is roadways and parking lot for personal vehicles. There is some material handling and maintenance activities associated with wastewater treatment operations in these basins as well.
- 4.4** A map of stormwater manholes and catch basins can be found on **Appendix B**.

KEY LOCATIONS MAP

CENTRAL WASTEWATER TREATMENT PLANT



BUILDINGS KEY		LEGEND KEY	
A. TRANSMISSION MAINTENANCE	N. BOILER BLDG.	BUILDING LOCATIONS	VISITOR PARKING
B. CUSTOMER SERVICE BLDG.	I. NEW INFLUENT PUMP STATION	ROAD TO TAGRO	RESTRICTED ACCESS GATES
C. PEAK WET WEATHER COMPLEX	J. FACILITIES SERVICES BLDG.	ACTIVE GATES	
C-1. GRT BLOWER BLDG.	K. DIGESTOR EQUIPMENT BLDG.		
C-2. GRT BLOWER BLDG.	L. OLD GAS UTILIZATION FACILITY		
C-3. GRT/PMW ELECTRICAL BLDG.	M. SOLIDS DEWATERING (BFP)		
C-4. PMW EFFLUENT PUMP STATION	N. DISINFECTION BLDG.		
D. OPERATIONS BREAKROOM	O. PLANT MAINTENANCE BLDG.		
E. OLD SLE BLDG.	P. SECONDARY TREATMENT BLDG.		
F. OLD LABORATORY TRAILER	P-1. OLD ENGINEERING ANNEX		
G. OPERATIONS CENTER	Q. OXYGEN GENERATION BLDG.		
H. OLD DIGESTOR BLDG.	R. TAGRO VISITOR'S CENTER		
	R-1. TAGRO STORAGE		

RESTRICTED ACCESS GATES		LEGEND KEY	
GATE 1- VEHICLE RESTRICTED ACCESS	GATE 2- VEHICLE RESTRICTED ACCESS	BUILDING LOCATIONS	VISITOR PARKING
GATE 3- PEDESTRIAN RESTRICTED ACCESS	GATE 4- PEDESTRIAN RESTRICTED ACCESS	ROAD TO TAGRO	RESTRICTED ACCESS GATES
GATE 5- PEDESTRIAN RESTRICTED ACCESS	GATE 6- PEDESTRIAN RESTRICTED ACCESS	ACTIVE GATES	

ACTIVE GATES		LEGEND KEY	
GATE 1- IN/OUT ACCESS	GATE 2- EXIT ONLY FROM THE PROCESS AREA	BUILDING LOCATIONS	VISITOR PARKING
GATE 3- IN/OUT ACCESS, MAIN PLANT ENTRANCE	GATE 4- IN/OUT ACCESS	ROAD TO TAGRO	RESTRICTED ACCESS GATES
GATE 5- EXIT ONLY	GATE 6- IN ONLY, MAIN TAGRO ENTRANCE	ACTIVE GATES	
GATE 7- //PLANNED//EXIT ONLY GATE	GATE 8- //PLANNED//EXIT ONLY FROM PROCESS AREA		
GATE 9- //PLANNED//ALLOWS 2-WAY PASSAGE	GATE 10- //PLANNED//IN/OUT ACCESS		
GATE P1- //PLANNED//PEDESTRIAN IN/OUT ACCESS	GATE P2- //PLANNED//PEDESTRIAN IN/OUT ACCESS		

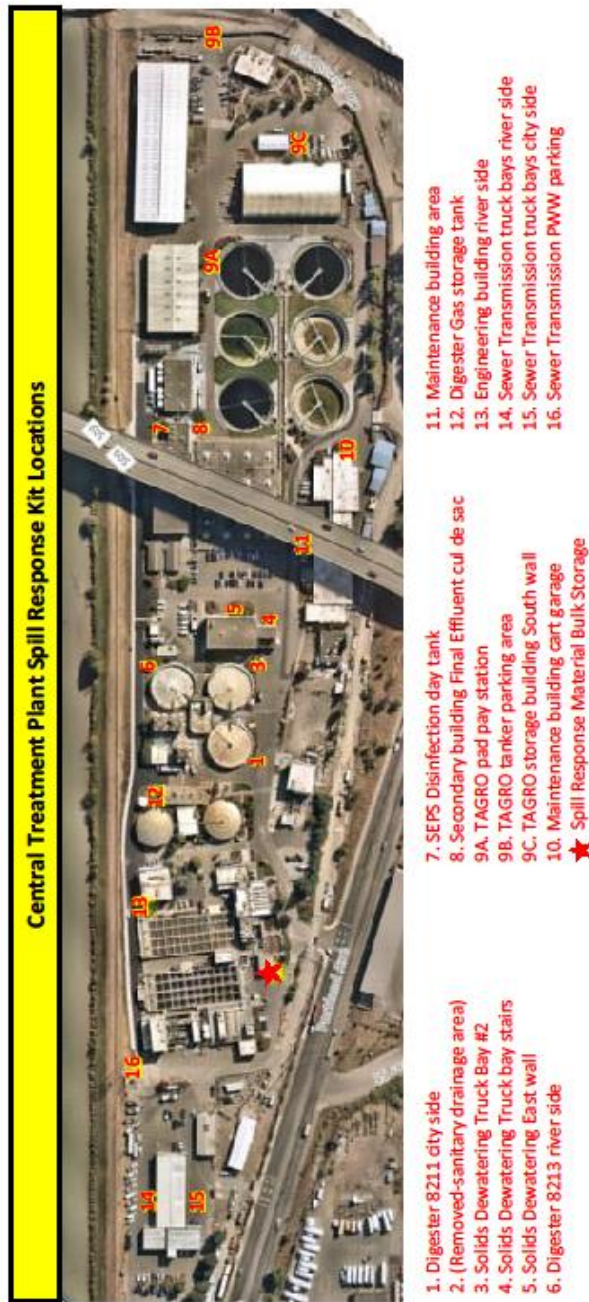
Appendix B

CENTRAL TREATMENT PLANT

STORMWATER POLLUTION PREVENTION PLAN SITE MAP



Appendix C



Appendix D

SWPPP Inspection Checklist

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and evaluate the effectiveness of best management practices required by this permit. Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection.

Email a copy of the completed inspection to: Aaron Pinkston, apinkston@cityoftacoma.org

CTP STORMWATER MONTHLY INSPECTION REPORT

SAP WORK ORDER:	SAP DESCRIPTION: OP P1 INSPC MO SWPPP PLANT CHECK			
DATE:	INSPECTION TIME – START:	END:		
PERSONNEL Qualified Inspector: CTP Section Representatives:				
WEATHER INFORMATION Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): Raining and overcast Was runoff from rain or snowmelt flowing at discharge areas shown on the Site Map during the inspection? <input type="checkbox"/> YES <input type="checkbox"/> NO Comments:				
1. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
In Compliance?	Yes	No	NA	Findings and Schedule of Remedial Action:
S3.B.1 SWPPP and Site Map Is the SWPPP Site Map current and accurate per section S3.B.1 of the Industrial Stormwater General Permit? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA				
Is the SWPPP inventory of activities, materials, and products current? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA				
S3.B.4.b.i.2) Good Housekeeping BMPs Are paved surfaces free of Accumulated dust/sediment and debris? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA • Current schedule of vacuum/sweep? __Monthly__ (min 1x Qtr)				
Are all outdoor waste receptacles: • In good condition? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA • Not leaking contaminants? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA • Is lid closed when not being accessed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA				

3. CERTIFICATION STATEMENTS AND SIGNATURES

Inspector-Certification: This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority (see Permit Condition G2) or a duly authorized representative of that person.

- ☐ The Facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ The Facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.

"I certify that this report is true, accurate, and complete to the best of my knowledge and belief."

Inspector's Signature	Inspector's Name-printed	Inspector's Title	Date

Permittee-Certification:

- ☐ The Facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ The Facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature-Person of Authority (permit condition G2.A) or Duly Authorized Representative¹	Printed Name- Person of Authority (permit condition G2.A) or Duly Authorized Representative¹	Date

¹A person is duly authorized representative only if 1) the authorization is made in writing by a person described in Permit Condition G2.A and submitted to Ecology, and 2) the authorization specified either an individual or a position having responsibility for the overall operation of the regulated Facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Stormwater Spill Kit Supplies							Initials:	Date:
Work Order		610000169256		OP 1,006001 PI INVEN Stormwater Supplies				
	Item	Description	Size	On Hand	Qty/ Pkg	Brand	Vendor #	Mfg Model #
	Absorbent Sock	Oil sorbent Sock	3' x 10'		12/ Bag	CONDOR	Granger	3CZR61
	Absorbent Pillows	Sphag Sorb Absorbent	18" x 18"		Bag	Sphag Sorb	Evol- Equipment	SS-12
	Pan	Concrete Mixing Tray	7 Gal		2 pack	Agree	Walmart #073562112	RG1752
	Absorbent Pads	Oil sorbent Pads	15" x 10"		100/ Box or Bag	Sorbent	Granger 1HUA8	ENV100
	Mats	Vinyl Mat	18" thick 3 ft x 60 ft		Roll	NOTRAX	Granger	3H392
	Absorbent Coils	Cobra Coils	3"x48"		12/ Box	SPC	Granger	3CZR49
	Absorbent Drip Pans	Oil Absorbent Drip Pans	10" x 10 "		Ea	Eagle	Eagle-mfg	1670
	Absorbent Pads	PIG Oil-Only UV Resistant Absorbent Mat	32" x 150"		Roll	New Pig	New Pig	MAT14107
	Absorbent Pads	PIG Oil-Only Absorbent Mat	30" x 150"		Roll	New Pig	New Pig	MAT1401
	Spill Absorbent	Standust Floor Absorbent	12 lb bag		Bag	Standust	Granger	46IR33
	Spill Absorbent	Sphag Sorb	2 cu ft		Bag	Sphag Sorb	evol- equipment	SPH-SS-2
	Absorbent Pillow	PIGB Sheen Cleanup Oil-Only Pillow	17x16x1.75 depth		10/ Box	New Pig	Newpig	SKM002
	Mini Boom	Oil sorbent Mini-Boom	8' x 18"		4/ Box	Oil-Dri	Granger	5TR23

INVENTORY SW LIST 2024

Appendix E

	Absorbent Booms	Casual/Chemical Absorbent Only	5' x 10'	2/ Bag	New Pig	HA1010
	Absorbent Coils	PIG Sheen Cleanup Oil-Only Sock	3' x 45"	12/ Box	New Pig	SHM930
	Absorbent Pads	HazMat Chemical Absorbent Only	15" x 20"	100/Box	New Pig	MAT1301
	Absorbent Sock	PIG Super Absorbent Sock	2.25' x 42"	3/5Box	New Pig	PIG312
	Sorbent Sock	Fluids Absorbent Universal	3' X 45"	12/Box	CONDOR	3CZR49
	Spill Absorbent	Throw & Go	5 Gallon	Bag	Amerisorb	AZTGS4-0331
	Spill Absorbent	Universal Absorbent	33.33 LB	Bag	Molan	6RKJ2
	Drain Socks	Drain Guard	45"x35"x15"	10 PK	Ultratech	53CH62
	Sorbent Sock (COR) UNIV SOCK		3' x 10'	4/Box	CONDOR	3CZR46
	Sorbent Sock	Absorbent Pillow	8.5' x 17"	10/Box	CONDOR	3CZR14

INVENTORY SW LIST 2024

Appendix F

Stormwater Sampling at Tacoma CTP	
<i>“Failure to follow these instructions may result in adverse impacts on the environment.”</i>	
<u>Service Group:</u> Operations	<u>Activity Definition:</u> Stormwater discharge sampling per SWPPP
<u>Equipment Name:</u> Manhole #6763612 and Aquip Filter TNK-0312	<u># of Personnel required to do work:</u> 1 or 2
<u>System:</u> CTP Surface Water drainage system	<u>Total Estimated Personnel Hours:</u> 2 hours
<u>Work Environmental Conditions:</u> Outdoors during rainfall	<u>Service Interval:</u> Quarterly, Seasonal, as needed
<u>Personal Protective Equipment:</u> Gloves, Safety Glasses, Rain Gear	<u>Lockout & Tag-out Locations/Equipment:</u> N/A
<u>Tools:</u> Broom, Five-Sided Manhole key, Flashlight, Nasco Swing Sampler extension handle, Sharpie marker, scissors, rite-in-rain field notebook. Note: if using cubetainers , bring a lab-cleaned 500 ml beaker with pour spout.	<u>Supplies:</u> New or lab-cleaned 1 Liter wide-mouth Nalgene bottles, (cubetainers ok) strapping tape, dry shop rags, powder-free disposable exam gloves, chain of custody form. Note: if using cubetainers, bring a bottle of DI water for rinsing.
<u>Related Equipment:</u> Laboratory pH meter, Laboratory refrigerator	
<u>Control Strategy:</u> City of Tacoma NPDES Industrial Stormwater General Permit for Central Treatment Plant; CTP Storm Water Pollution Prevention Plan; WA Dept. of Ecology Stormwater Sampling Manual Publication No. 15-03-044	
<div style="text-align: center;">Overview</div> <ul style="list-style-type: none"> The NPDES permit requires sampling of the stormwater discharge at least once per quarter, and at the first fall storm event each year. “First fall storm event” is defined as the first time after September 1st that precipitation occurs resulting in a stormwater discharge from the Facility. Stormwater grab samples are collected at two sampling points at CTP: the Aquip Filter TNK-0312 at and MH #6763612, as identified on the CTP SWPPP site map. Samples must be collected within 12 hours of start of stormwater discharge. The collected stormwater samples will be tested for the following parameters: turbidity, pH, zinc, copper, and visible oil sheen. City of Tacoma Environmental Services Laboratory (at Center for Urban Waters) will perform the analysis for turbidity, zinc, and copper. 	

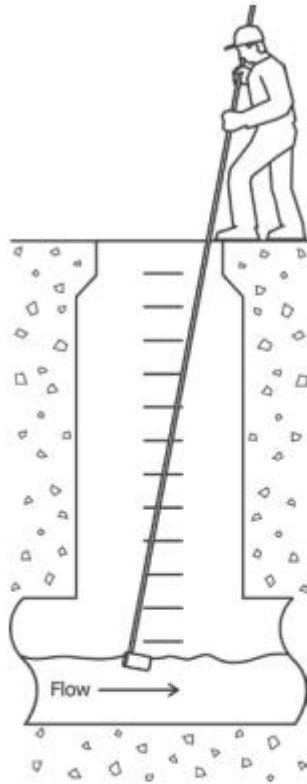
- Testing results will be reported to the Department of Ecology in the quarterly DMR, to determine if the SWPPP is adequate and to assess best management practices.

Procedure	
Outline	Step-by-Step
1. Advance Planning	<ol style="list-style-type: none"> Evaluate weather forecast for rain event likelihood and intensity. Estimate when to sample (which day/time of day). Contact the lab by email so they can create the Element work order and arrange a pickup time on the estimated day. <ol style="list-style-type: none"> Current contact is Eric Bitten 253-254-9763, or Chelsea Nelson 253-502-2218. Gather tools and supplies for the sampling kit from the above list. <ol style="list-style-type: none"> Bring along extra bottles and disposable gloves. Label one bottle or cubetainer for each Sample point. Pre-assemble the sampler pole with the bottle or cubetainer for MH #6763612. Start a new event page in the field notebook.
2. Determine if conditions are right for sampling	<ol style="list-style-type: none"> Record start time of rain event in field notebook. <ol style="list-style-type: none"> Time of start of rain accumulation can be found on the PCS <i>Site Security</i> screen (click the “Gates” button on the menu). Open the trend for <i>Daily Rain Total</i> to see time and amount. <p>Note: Samples must be collected during the first 12 hours of a stormwater discharge. In some cases, you may be unable to determine when the discharge began, (e.g., when arriving at a Facility on a Monday morning) and unable to determine if the sample was collected within first 12 hours of discharge.</p>
3. Prepare Documentation/Field notes	<ol style="list-style-type: none"> For each sample taken, record the following information and retain it on-site in case of Ecology audit. <ol style="list-style-type: none"> Sample date. Sample time. A notation describing if the Permittee collected the sample within the first 12 hours of stormwater discharge events. An explanation of why the Permittee could not collect a sample within the first 12 hours of a stormwater discharge event, if it was not possible; or, if it is unknown (e.g., discharge was occurring during start of regular business hours), an explanation of why the Permittee does not know if a sample was collected within or outside the first 12 hours of stormwater discharge. Sample location (using SWPPP identifying number: MH #6763612 or TNK-0312 Effluent).

	<ul style="list-style-type: none"> vi. Method of sampling and method of sample preservation, if applicable. vii. Name of the individual(s) who performed the sampling. viii. Weather conditions <p>b. Although not required, it would also be beneficial to record the following information:</p> <ul style="list-style-type: none"> i. Weather preceding the sampling event: <ul style="list-style-type: none"> 1. How many days/weeks/months since last significant rainfall. 2. Estimate of time it began raining. 3. Estimate of time that discharge began at the sampling point. 4. Amount (inches) and/or intensity of precipitation. 5. Whether discharge includes ice or snowmelt runoff. ii. How you collected the sample. Example: from a ditch by hand or from a manhole with the bottles on a pole. iii. Any unusual circumstances that may affect the sample results.
4. For Sample point TNK-0312 Aquip Filter Effluent	<ul style="list-style-type: none"> a. Record the sample time in field notebook and on bottle. b. Don new pair of powder-free disposable gloves. c. Open the sample spigot valve at the discharge of Aquip Filter TNK-0312. Let the flow run for ten seconds. d. Place the bottle under the sample spigot flow and collect at least 600ml of filtrate. e. Check sample for visible oil sheen. Record observation. f. As soon as the sample is collected, cap the bottle, and proceed directly to the CTP lab for pH analysis. <p>Note: Hold time for getting a pH reading is 15 minutes. Proceed to lab after each sample is taken.</p>
4. For Sample point at MH #6763612	<ul style="list-style-type: none"> a. Sweep off any gravel or loose debris from the MH lid, so nothing can roll off into the sample area when you open it. b. Remove the MH lid. Look inside and observe if there is any visible oil sheen. c. Record your observations. <p>Note: Some sheens are not oil and result from natural processes. A sheen resulting from a natural process will typically break up into irregular platelets that do not reform and have a mirror-like appearance.</p> <p>Note: If there <u>is</u> a visible oil sheen, it is considered a benchmark exceedance that needs to be reported on the quarterly DMR.</p>

	<ul style="list-style-type: none"> d. Record the sample time in field notebook and on bottle. e. Don new pair of powder-free disposable gloves. f. Tape the sample bottle or beaker to the sampler pole with waterproof tape if not already assembled. g. Working carefully, lower the sampler pole with bottle (cap removed) into the manhole, following these principles: <ul style="list-style-type: none"> i. Grab samples with the stormwater entering directly into bottles brought from the lab. Do not transfer the samples from a container that may not be specifically cleaned for collecting lab samples. ii. When holding the sample bottle, keep your hands away from the opening, in order to prevent contaminating the sample. iii. Always hold the bottle with its opening facing upstream (into the flow of water) so that the water enters directly into the bottle and does not first flow over the bottle or your hands. iv. Sample where the water has a moderate flow and, if possible, some turbulence, so that the stormwater discharge will be well mixed, and the sample will be representative. Sampling in still water should be avoided. Include in your field book a note about the sample location and how briskly the water appears to be moving. v. Sample from a central portion of the stormwater flow, avoiding touching the bottom or sides of the vault to avoid stirring up solid particles. vi. Try to get at least 600ml in the 1L bottle, which will be challenging if flow is low. vii. As soon as the sample is collected, cap the bottle and proceed directly to the CTP lab for pH analysis. <p>Note: Hold time for getting a pH reading is 15 minutes. Proceed to lab after each sample is taken.</p>
5. Test for pH	<ul style="list-style-type: none"> a. Run the calibration check on the CTP lab benchtop pH analyzer if required. b. Take a pH reading directly from the sample bottle. (No stir bar). c. Verify the bottle is labeled with the correct sample identification.
6. Prepare Sample for pickup or delivery	<ul style="list-style-type: none"> a. Fill out Chain of Custody form (spares located in a pocket on the lab refrigerator door). Be sure to include the date, time of start of discharge, time sampled, sampling person's signature, and pH reading. b. Place the sample bottle and COC form in the lab refrigerator to await pickup by ES lab staff.
7. Collect at second sample point	<ul style="list-style-type: none"> a. Repeat specific steps for the other sample point.

	Note: Use same COC for both sample bottles.
<p style="text-align: center;">Standard</p> <p>Collection and documentation of stormwater discharge sample as required by the NPDES Industrial Stormwater General Permit and the CTP Stormwater Pollution Prevention Plan.</p>	



When sampling from a manhole, use a pole to safely sample from above ground. Avoid touching the sides of the manhole or pipes with the bottle to prevent contamination. Place the opening of the bottle upstream so that the flow enters the bottle directly.

Each bottle can be fastened to the pole by holding the bottle against it and wrapping tape tightly around the bottom and the top of the bottle as you hold the bottle firmly to the pole. Filament strapping tape works well for this purpose as it is waterproof and strong. Rubber bands and zip-ties are also a possibility.

If the flow in the storm drain is shallow, the bottle may have to be positioned horizontally with the bottle's opening somewhat higher than its bottom. When sampling in a manhole, be careful not to scrape the bottle against the sides of the pipe to avoid picking up extra solids in your sample.



Lab Work Order #

Amount	
N/A	
Standard (days)	
Expedited (days)	
Due Date	

[file:///Z:/LAB-OPSSOPs/benchsheets&Logs/\\Blank](#)

Appendix G



18 December 2023

Matt Symington
ES Wastewater Management
2201 Portland Ave.
Tacoma, WA 98421

Subject: Central Treatment Plant Stormwater

Enclosed are the analytical results for samples collected 12/04/2023.

Quality Control Data are included with the sample results for your review.

If you have any questions concerning this report, call me at (253)502-2130. Please note that remaining samples associated with this report will be discarded **3 months** from the date of this report unless we are notified otherwise.

Sincerely,

DocuSigned by:

Stuart Magoon

F41AFFAA30F64EB...

Stuart Magoon
Assistant Division Manager
Environmental Services Laboratory

cc.

326 East D Street | Tacoma, Washington 98421-1801 | (253) 591-5588

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled
CTP_TNK-0312	2312023-01	Water	Grab	04-Dec-23 08:53
CTP_MH_57	2312023-02	Water	Grab	04-Dec-23 09:10

CHAIN OF CUSTODY, SAMPLE RECEIPT, PRESERVATION AND STORAGE

Samples were received under appropriate Chain of Custody procedures. Containers were properly preserved and stored in accordance with the applicable method requirements.

HOLDING TIMES

All analyses were performed within the required holding times.

METHODS

The samples were analyzed by the following methods:

Standard Methods SM 4500-H+ B pH
Standard Methods SM 2310B for Turbidity
EPA Method 200.8 for Total Metals

MINIMUM REPORTING LIMITS

All analytes are reported to the Minimum Project Report Limit. Some analytes may be reported to the Method Detection Limit (MDL) to meet the Minimum Project Reporting Limit. In these cases, values are qualified as estimated (J) between the MDL and Practical Quantitation Limit (PQL) as not as accurate as values reported greater than the PQL (the low standard or 3 - 5 times the MDL).

BLANKS

Blanks were analyzed at the required frequencies of the methods. Analytes were not detected in the blanks, sample concentrations were greater than 10 times the blank values, or the analytes detected in the blanks were not detected in associated samples.

LABORATORY CONTROL SAMPLES

Laboratory Control Samples were analyzed with these samples. The recoveries were within the laboratory limits.

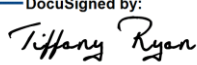
DUPLICATE SAMPLE ANALYSIS

Duplicate analysis was performed with these samples. Relative percent differences were within the laboratory limits.

DATA AVAILABILITY

All data associated with the samples referenced in this report are archived at the Environmental Services Laboratory and are available upon request.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and project QAPP.

DocuSigned by:

9D4B4D82A1DE4B7...

Reviewed By

CTP_TNK-0312

2312023-01 (Water) 04-Dec-23 08:53

Analyte	Result	PQL	MDL	Units
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Conventional

SM 2130 B-2011	Prepared: 05-Dec-23	Analyzed: 05-Dec-23			
Turbidity		0.46 U	1.00	0.46	NTU

Metals

EPA 200.8 Rev.5.4 1994	Prepared: 07-Dec-23	Analyzed: 11-Dec-23			
Copper		0.800 U	0.800	0.800	ug/L
Zinc		1.68 U	5.00	1.68	ug/L

CTP

SM 4500-H+ B-2011	Prepared: 04-Dec-23	Analyzed: 04-Dec-23			
pH		7.2	0.1		pH Units

CTP_MH_57

2312023-02 (Water) 04-Dec-23 09:10

Analyte	Result			PQL	MDL	Units
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Conventional

SM 2130 B-2011	Prepared: 05-Dec-23	Analyzed: 05-Dec-23				
Turbidity		7.12		1.00	0.46	NTU

Metals

EPA 200.8 Rev.5.4 1994	Prepared: 07-Dec-23	Analyzed: 11-Dec-23				
Copper		3.64		0.800	0.800	ug/L
Zinc		41.9		5.00	1.68	ug/L

CTP

SM 4500-H+ B-2011	Prepared: 04-Dec-23	Analyzed: 04-Dec-23				
pH		7.1		0.1		pH Units

Conventional - Quality
Control Environmental
Services Laboratory

Sample ID Analyte	Result	MDL	Units	Spike Level	Source Result	%REC Limits	RPD Limit
						%REC	RPD

Batch BGL0086 - SM 2130 B-2011

Blank (BGL0086-BLK1)	Prepared & Analyzed: 05-Dec-23						
BGL0086-BLK1							
Turbidity	0.46 U	0.46	NTU				
Duplicate (BGL0086-DUP1)	Source: 2312023-01			Prepared & Analyzed: 05-Dec-23			
BGL0086-DUP1							
Turbidity	0.46 U	0.46	NTU		ND		30
LCS (BGL0086-BS1)	Prepared & Analyzed: 05-Dec-23						
BGL0086-BS1							
Turbidity	99.6		NTU	100		100	90-110

Metals - Quality Control
Environmental Services
Laboratory

Sample ID Analyte	Result	MDL	Units	Spike Level	Source Result	%REC Limits	RPD Limit
						%REC	RPD

Batch BGL0109 - EPA 200.8 Rev.5.4 1994**Blank (BGL0109-BLK1)**

Prepared: 07-Dec-23 Analyzed: 11-Dec-23

BGL0109-BLK1

Copper	0.800 U	0.800	ug/L
Zinc	1.68 U	1.68	ug/L

LCS (BGL0109-BS1)

Prepared: 07-Dec-23 Analyzed: 11-Dec-23

BGL0109-BS1

Copper	50.6	0.800	ug/L	50.0	101	85-115
Zinc	51.1	1.68	ug/L	50.0	102	85-115

ES Wastewater Management2201 Portland Ave.
Tacoma WA, 98421Project: **Central Treatment Plant Stormwater** Project

Number: 80000154

Project Manager: Matt Symington

Reported: 18-
Dec-23 17:20**Notes and Definitions**

U	Analyte Not Detected at or above the associated value
UJ	Analyte Not Detected at or above the associated estimated value
J	The analyte was positively identified. The associated value is an estimate. For BOD Analysis: The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/l dissolved oxygen depletion. Therefore the reported BOD result is estimated biased high
ND	Analyte NOT DETECTED at or above the reporting limit
E	Analyte was determined above the upper quantitation range of the method. The associated value is an estimate.
NJ	There is evidence the analyte is present. The associated value is an estimate.
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



Page 1 of 1

Lab Work Order Number 4312023

[illegible]

for Dec 12/5/23 @ 10:34

Appendix H



Washington State Department of Ecology

Discharge Monitoring Report (DMR)

Page: 1 of 2

Permit Number: WAR000711

Permittee: Central Wastewater Treatment Plant

Facility County: Pierce

Receiving Waterbody: Puyallup River

Monitoring Period: 10/01/2023 - 12/31/2023

Outfall: 001 - Puget Sound Puyallup River

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured Quarterly G-ab	pH Standard Units Quarterly G-ab	Oil & Grease Test No. Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly G-ab	Zinc Total Micrograms/L (ug/L) Quarterly G-ab	Turbidity (NTU) Measured Quarterly G-ab	pH Standard Units Quarterly G-ab	Oil & Grease Test No. Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly G-ab	Zinc Total Micrograms/L (ug/L) Quarterly G-ab	Turbidity (NTU) Measured Quarterly G-ab
10-M	12/4/23	M	M	M	M	M	7.12	7.10	No	3.64	41.9	M
Minimum		M	BM: >= 5.0 (RO)					7.10	BM: >= 5.0 (RO)			
Average		M			M	M	7.12			3.64	41.9	M
		BM: <= 25			BM: <= 14	BM: <= 117	BM: <= 25			BM: <= 14	BM: <= 117	BM: <= 25
Maximum		M	BM: <= 9.0 (RO)					7.10				
								BM: <= 9.0 (RO)				

Reporting Codes Used: M - Monitoring Is Conditional/Not Req This MP

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Aaron Pinkston
Signature

2/12/2024 7:51:46 AM
Date

Appendix I

