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REPORT ON

SURFACE WATER REPORT
PACCAR RENTON SITE
RENTON, WASHINGTON

by
Haley & Aldrich, Inc.
Seattle, Washington

for
PACCAR, Inc.
Renton, Washington

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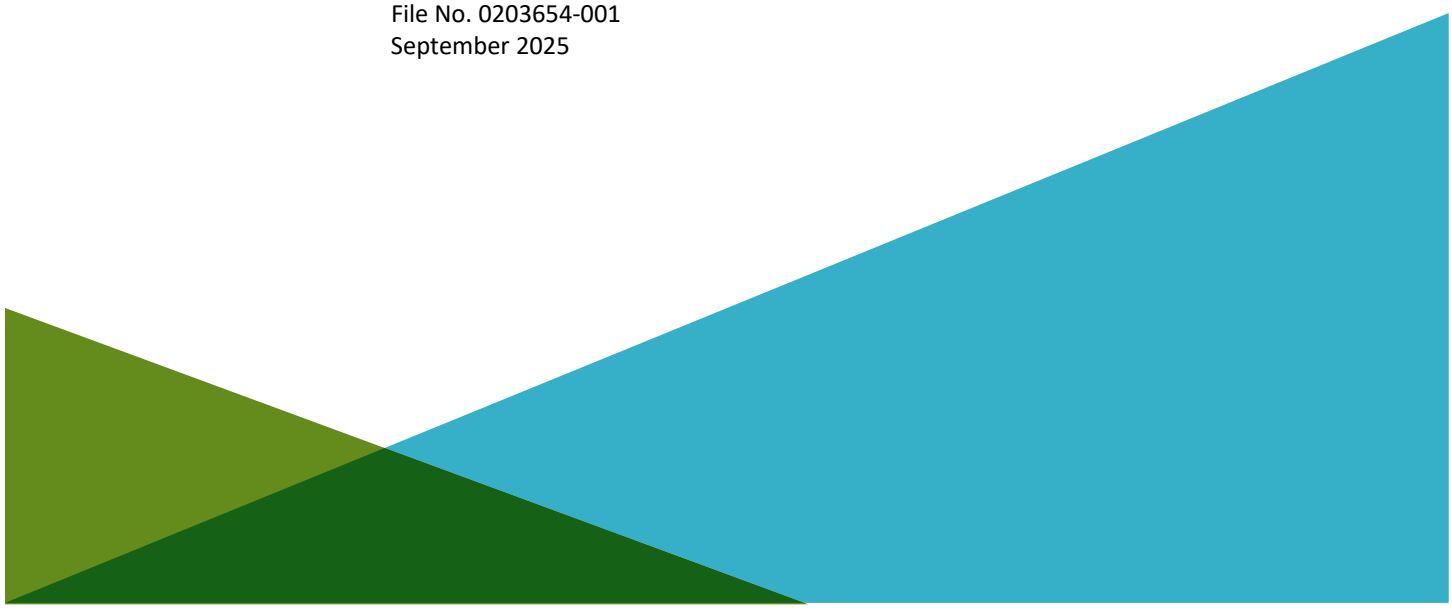

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RENTON, WASHINGTON

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1. Introduction

This surface water assessment was prepared to review and evaluate options for surface water management at the PACCAR Renton Site (Site) located in Renton, Washington (Figure 1). The Site was listed as a National Priorities List (NPL) Superfund site in 1990 (Figure 2). The Site is currently managed under a Consent Decree (1991; updated 1994) with the Washington Department of Ecology (Ecology). A remedial investigation and feasibility study was completed by PACCAR in 1989 and 1990, respectively (Hart Crowser, Inc. [Hart Crowser], 1989 and 1990, respectively). The primary risks to human health were identified to be from direct contact with contaminated soil and from blowing dust. Constituents of concern (COCs) and cleanup levels (CULs) are defined in the Cleanup Action Plan (CAP) for soil, groundwater, and surface water (Ecology, 1991). Copper, hexavalent chromium, lead, nickel, and zinc were identified as the surface water COCs.

Cleanup actions were completed at the Site between 1978 and 1997, including covering the remaining soils that are above CULs with structural fill or pavement (Figure 3). Following the completed cleanup actions, groundwater and surface water monitoring has been and is currently performed in accordance with the CAP and the Confirmational Monitoring and Inspection Plan (CMIP), prepared by Dalton, Olmstead & Fuglevand (DOF; 1997). Groundwater and surface water monitoring reports have been prepared on an annual basis (Hart Crowser, 1998-2024)

Ecology completed periodic reviews of the Site in 2009, 2014, and 2021. The reviews evaluated the progress of cleanup actions and monitoring data to ensure that human health and the environment are being protected at the Site. As part of the 2021 periodic review, Ecology identified the following concerns regarding surface water cleanup actions and monitoring data.

1. The conditional point of compliance for surface water is the point or points where surface water collected from the Site is discharged across the property boundary, whether through surface ditches or storm drains. Ecology identified three conditional surface water sampling locations for the Site—SW-3, SW-5, and SW-6 (Figure 4).

2. Ecology noted that surface water CULs for copper, hexavalent chromium, lead, and zinc have not been consistently achieved in stormwater sampling locations SW-3, SW-5, and SW-6.

3. Per the CAP, monitoring must continue as long as contaminants are present above Model Toxics Control Act (MTCA) CULs for soil, groundwater, and surface water.

4. The cause of the elevated metals in stormwater must be evaluated per the Contingency Plan in the CMIP.

5. Trend analysis and time-series plots need to be incorporated into future monitoring events, and a detailed discussion of results needs to be incorporated in future monitoring reports. Monitoring reports should incorporate data interpretation, compliance with cleanup standards, historical stormwater data, conclusions, and recommendations.

6. The Site includes swales, rain gardens, and unpaved grassy areas. While the stormwater infiltration areas are best management practices (BMPs) for stormwater management, a potential concern is stormwater infiltration to groundwater in areas where there is remaining

contaminated soils or stabilized soil cells that are not covered by pavement or buildings. This could potentially increase leaching of soil contaminants into groundwater in those areas, which should be evaluated and mitigated.

7. An assessment of surface water needs to be completed that will include conclusions and any recommendations, and be presented in a report by PACCAR Inc. and provided to Ecology for review.

Each of Ecology's concerns presented in the 2021 periodic review have been addressed in this report.

2. Purpose

Ecology requested PACCAR complete a comprehensive review of the surface water quality at the Site. The purpose of the review is to assess the surface water management program at the Site. The specific objectives of the report are to:

- Address comments provided in the Ecology 2021 Periodic Review;
- Summarize and provide an updated description of the current surface water drainage system, which has been extensively modified since surface water monitoring began at the Site;
- Review the current, applicable surface water management regulatory programs;
- Assess the surface water quality monitoring program; and
- Provide recommendations for future surface water management and monitoring.

3. Project Background

3.1 SITE LOCATION

The Site is located in the City of Renton, Washington, approximately 1/2 mile northeast of the downtown area (Figure 1). The boundaries of the Site correspond to the boundaries of the NPL site, as defined by the 1991 Consent Decree (Figure 2). The Site is bounded by Garden Avenue North on the west, Houser Way North on the east, North 4th Street on the south, and North 8th Street on the north. The Site is 83 acres in area.

3.2 SITE HISTORY

A variety of industrial operations have used the Site since 1907. The Site was placed on the NPL on February 21, 1990. The cleanup is managed by Ecology under the authority of the MTCA (Chapter 70.105D Revised Code of Washington) and other applicable state and federal laws. This Site is the first cleanup Site to be managed under MTCA in Washington State.

Site cleanup was conducted in accordance with a Consent Decree and CAP in five phases between 1991 and November 1997. The cleanup actions completed at the Site consisted of:

- Excavating and treating soil above hotspot action levels using solidification (metals) and bioremediation (soil mixing with amendments for soils containing petroleum residues).
- Excavating and disposing off Site a small volume of soil and sediment containing polychlorinated biphenyls (PCBs) and carcinogenic polycyclic hydrocarbons (cPAHs) above hotspot action levels.
- Covering the remaining soils that are above CULs with structural fill or pavement to prevent:
  - Direct contact with contaminated soil;
  - Erosion of contaminated soil; and
  - Generation of contaminated dust.

Excavation of soils was completed in December 1995. Soil that contained metals above action levels were stabilized with concrete and placed in storage cells. Stabilization activities were completed in 1994. Excavated soils that contained petroleum hydrocarbons above action levels were bioremediated and placed back on the Site. Bioremediation of soils containing petroleum hydrocarbons was completed in October 1997. Areas with stabilized and bioremediated soil was covered with clean structural fill, buildings, or pavement. Figure 3 summarizes the current pervious and impervious ground surface conditions at the Site.

A chronology of major milestones for the Site are provided below.

1907 to 1988	Industrial Operations
1989	Remedial Investigation Completed
1990	Final NPL Listing
1990	Feasibility Study Completed
1991	Consent Decree Finalized, including the Final Cleanup Action Plan

1993	Kenworth Truck Plant Begins Operations
1994	Consent Decree Amendment
1997	Cleanup Actions for Soil Completed
1997	Confirmational Monitoring Plan Issued
1998 to 2013	Confirmational Monitoring - Semiannual Surface Water Sampling
2004	PACCAR Research & Development Facility Completed
2009	Periodic Review - Ecology. Groundwater sampling requirement reduced. Groundwater and surface water monitoring continues on annual basis.
2014	Periodic Review - Ecology. Additional groundwater sampling requirement reduced. Groundwater and surface water monitoring continues on annual basis.
2014	Ecology - No Further Action (NFA) given for soil in southwest portion of Site.
2014 to current	Confirmational Monitoring - Annual Surface Water Sampling performed.
2015 to 2016	PACCAR Parts Distribution Center (PDC) Construction
2021	Periodic Review - Ecology.

3.3 SITE FEATURES

This section describes the major features and facilities at the Site. A map showing the Site features is provided in Figure 2.

3.3.1 Kenworth Truck Plant

The northern half of the Site is occupied by the Kenworth Truck Plant (Truck Plant), a subsidiary of PACCAR, Inc., and manufactures specialty trucks under the Kenworth brand. The Truck Plant is located at 1601 North 8th Street and began operations in 1993. The Truck Plant consists of a 300,000-square-foot main assembly/office building surrounded by pavement. Several smaller buildings, the former Research and Development (R&D) Building (now an administrative building), Alignment Building, and Waste Handling Building and Flammable Material Waste Treatment Building are located west and south of the main building. A large parking lot for employee and visitors is located east of the main building. A stormwater treatment facility is located north of the main building.

3.3.2 Active USA, Inc.

Active USA, Inc. (Active) leases a 5-acre facility south of the Kenworth Plant. The Active facility is located at 540 Garden Avenue North. Active is contracted to transport completed Kenworth trucks to customers in the United States. The Active facility consists of paved parking areas around a small maintenance/office building. A fuel island, located west of the maintenance/office building, supplies diesel from two aboveground storage tanks. A stormwater treatment facility is located on the west side of the Active facility.

3.3.3 Research and Development

The R&D facility occupies 8 acres located on the east side of the Site. The address of the R&D facility is 485 Houser Way North. R&D is the research arm of PACCAR. The R&D facility consists of a 24,000-

square-foot building with a paved parking lot east of the building. The R&D facility was completed in 2004. An underground stormwater vault is located on the west side of the R&D facility.

3.3.4 PACCAR Parts Distribution Center

The PACCAR Parts Distribution Center (PDC) is located at 405 Houser Way North at the southeast area of the Site. The PDC is a truck parts sales and distribution center. The PDC is a 176,000-square-foot building that was constructed between 2015 and 2016 and opened in June 2016. A stormwater detention pond is located on the north of the building and a rain garden is located east of the building.

3.3.5 Undeveloped Area

Treated contaminated soils and excavated treated contaminated soils from construction of the Truck plant were placed on the southern half of the property. The majority of undeveloped area consisted of remediated soil with a clean structural fill cover. Historically, Building 1 and the associated asphaltic parking lot was located just south of the structural fill cover area. The southern half of the Site was undeveloped until 2015. In 2015, Building 1 and most of the associated paved parking area were demolished to make room for a new PDC in the southeast corner of the undeveloped area. A small portion of pavement remains, which was used to access the PDC during construction.

Prior to construction of the PDC, non-impacted, imported fill material was placed at the proposed PDC building footprint in the southwest corner of the Site as a preload and was placed above the uncontaminated cap and previously treated contaminated soil. The preload fill material consists of previously imported fill material from several construction sites in the Seattle area. The imported fill was sampled and tested for soil COCs. During construction of the PDC, the preload fill material was moved to the southwest area and was reseeded to form a grass cover.

Haley & Aldrich, Inc. (Haley & Aldrich) is not aware of any current plans to redevelop this southwest portion of the Site. If development is considered for this portion of the Site in the future, we understand that any non-structural fill will be removed, and the building pad will be reevaluated for potential building support.

4. Surface Water Drainage System

The function of the surface water drainage system is to collect and convey stormwater to a discharge point. Stormwater consists of rainwater generated from impervious surfaces such as pavement, building roofs, and runoff water from vegetated areas. Impervious surfaces are typically sloped to direct water to an inlet or a swale and collected stormwater is conveyed via underground piping to a treatment facility and/or for discharge off Site.

Haley & Aldrich identified the main elements of the current surface water drainage system using a combination of Geographic Information System data from City of Renton, and existing Site drawings provided by PACCAR, and supplemented by our field inspections. The field inspections were limited to visually identifying and verifying components of the surface water drainage system at the Site. From the Site data and field inspections, we developed a surface water drainage map which shows the basic elements of the current surface water drainage system, direction of flow, discharge points, and drainage areas. The surface water drainage map (Figure 4) is based on best available information as we were not able to verify all aspects of the drainage system. Additional activities, such as inspecting catch basins and manholes, use of utility location services, and dye tracing would be required to verify some details of the surface water drainage system.

The area of pervious and impervious surfaces at the Site is shown on Figure 3 and summarized in attached Table 1. Pervious surfaces allow rainfall to percolate into the soil to filter out pollutants and generally consist of vegetated areas, grass-lined swales, grass, and gravel surfaces. Impervious surfaces are solid surfaces, such as pavement and buildings, and rainfall runoff is collected in the surface water drainage system. The total area of the Site is just over 83 acres of which 37 percent is covered by pervious surfaces and 63 percent is covered by impervious surfaces.

4.1 SURFACE WATER DRAINAGE ELEMENTS

The surface water drainage system is shown on Figure 4. The surface water drainage system at the Site consists of the following elements:

1. Drainage Inlets
2. Catch Basins
3. Trench Drains
4. Underground Piping
5. Manholes
6. Swales
7. Stormwater Treatment Facilities
8. Stormwater Detention Pond

Drainage inlets are the primary inlets for water to flow into the underground pipe network. The drainage inlets include catch basins, inlets, and trench drains.

A **catch basin** is an underground concrete structure fitted with a slotted grate. Catch basins collect stormwater runoff and route it through underground pipes, allowing sediment and debris to settle. It also can be used as a junction in a pipe system to allow access. Catch basins are located in paved areas and swales.

A **trench drain** is a trough-shaped concrete channel with a grated lid characterized by long length relative to narrow width. A trench drain surrounds the Truck Plant and is identified as the Perimeter Trench Drain on Figure 4. The trench drain ranges from 24 to 36 inches in width and 12 to 48 inches in depth. Small trench drains are used to capture stormwater from loading docks and sidewalks.

Underground piping conveys stormwater around the Site. The pipe network consists of trunk lines and laterals which connect the drainage inlets and treatment facility and/or discharge points. Pipes range in size from 6 to 48 inches in diameter and are made of metal, cement, or plastic. There are three major trunk lines which convey stormwater across the Site. The first is the east trunk municipal drain line which traverses from the southeast corner to the north side of the Site. This trunk line conveys off-site stormwater in a northerly direction. The second is the central trunk line which conveys water westward and then northward from the central portion of the Site. The third is the west trunk line which conveys stormwater northward along the western side of the Truck Plant.

Manholes allow access to underground utilities. Manholes are typically found at pipe junctions, and bends. Manholes are also placed periodically along long runs of pipe. The manholes are used to access, clean, and maintain the surface water drainage system. The manhole covers consist of circular or rectangular steel lids.

Swales are grass-lined depressions located in parking lots and adjacent to paved areas. Swales are designed to collect water and remove sediment and pollutants from surface runoff. They generally consist of a drainage course material with gently sloped sides and filled with grass and/or riprap. The water's flow path is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Most swales have catch basins to collect overflow stormwater.

Stormwater treatment facilities are shallow manmade ponds designed to treat stormwater through biological processes. These facilities use dense vegetation and settling to filter sediment and oily materials out of stormwater. There are two stormwater treatment facilities located on the north and west sides of the Site. A rain garden, which provides similar treatment, is located east of the PDC.

Stormwater detention ponds collect and detain stormwater. A stormwater detention pond, located north of the PDC, is designed to store and slowly release stormwater into the stormwater conveyance system, as needed.

4.2 SURFACE WATER DISCHARGE LOCATIONS

Four locations were identified where surface water leaves the Site. The discharge locations shown on Figure 4 include:

- **North Discharge Point (SW-3).** Stormwater from the west trunk line, north treatment facility, and the east trunk municipal drain line encompasses R&D, Active facilities, and most portions of the Truck Plant (excluding the northeast parking area), leaves the Site at the north discharge point (labeled as N Discharge Point). Stormwater enters the municipal drainage system, which discharges into John's Creek and eventually Lake Washington at Gene Coulon Memorial Beach

Park (Figure 1). The north discharge point coincides with surface water sampling point SW-3. The north discharge point represents off-Site municipal stormwater and Site stormwater with a drainage area of 71.46 acres of which 30 percent is covered by pervious surfaces and 70 percent is covered by impervious surfaces.

- **Northeast Discharge Point**. Stormwater from the eastern portion of the Truck Plant parking lot leaves the Site and discharges into the municipal storm drain system located on Houser Way. The northeast discharge point (labeled as NE Discharge Point) represents a drainage area of 3.14 acres of which 30 percent is covered by pervious surfaces and 70 percent is covered by impervious surfaces.
- **West Discharge Point.** Stormwater from the northwest corner of the undeveloped area discharges into the municipal storm drain on Garden Avenue. The west discharge point (labeled as W Discharge Point) is located downstream of surface water sampling point SW-6. The west discharge point represents a drainage area of 2.26 acres of which 98 percent is covered by pervious surfaces and 2 percent is covered by impervious surfaces.
- **Southwest Discharge Point**. Stormwater from the southwest corner of the undeveloped area discharges to the municipal storm drain on Garden Avenue. The southwest discharge point (labeled as SW Discharge Point) represents a drainage area of 6.47 acres of which 88 percent is covered by pervious surfaces and 12 percent is covered by impervious surfaces. This southwest area of the undeveloped area received a NFA opinion letter and does not need to be monitored as part of the surface water monitoring program.

4.3 SURFACE WATER DRAINAGE AREAS

We identified the following surface water drainage areas shown on Figure 5 and described below.

1. **Main Truck Plant.** Stormwater from roof drains and impervious paved areas is conveyed to the perimeter trench drain surrounding the Kenworth Truck Plant/Office building. The perimeter trench drain is routed to an oil/water separator located just south of the north treatment facility. After passing through the oil/water separator, stormwater enters the north treatment facility. Treated stormwater leaves the north treatment facility (SW-DP) and discharges into the municipal storm drain system at the north discharge point (SW-3). The Truck Plant has an area of 30.40 acres of which 13 percent represents pervious surfaces and 87 percent is covered by impervious surfaces.
2. **Truck Plant Main Parking Lot**. Stormwater from the east side of the Kenworth Truck Plant/building and the main parking lot is collected in catch basins and swales and conveyed directly to the east side of the north treatment facility. The Truck Plant Main Parking Lot has an area of 9.59 acres of which 34 percent is pervious and 66 percent is impervious.
3. **Northeast Truck Plant Parking Lot**. A small area of the northeast portion of the Truck Plant parking lot is drained via catch basins and conveyed to municipal storm drain systems at the northeast discharge point. The Northeast Truck Plant Parking Lot has an area of 3.14 acres of which 30 percent is pervious and 70 percent is impervious.
4. **Active**. Stormwater from roof drains and paved surfaces on the Active facility is collected in catch basins and conveyed to the west treatment facility. Discharge from the west treatment facility is conveyed to the junction where the central trunk line flows into the west trunk line for discharge into municipal storm drain at the north discharge point. The Active facility has an area of 5.78 acres of which 14 percent is covered by pervious surfaces and 86 percent is covered by impervious surfaces.

5. **R&D**. Stormwater from roof and impervious surfaces at the R&D facility is collected in catch basins conveyed to the central trunk line. The R&D facility has an area of 5.45 acres of which 18 percent represents pervious surfaces and 82 percent is covered by impervious surfaces.
6. **PDC.** Stormwater from roof and impervious surfaces is conveyed either to the stormwater detention pond or rain garden. Overflow from the rain garden and the west/south storm drain system is conveyed to the southern stormwater detention pond. Overflow from the stormwater detention pond is conveyed northward to the central trunk line. The PDC has an area of 10.54 acres of which 30 percent is covered by pervious surfaces and 70 percent represents impervious surfaces.
7. **Existing Structural Fill Cover Areas.** The remaining portion of the Site drains into three subdrainage areas. This drainage area is 18.44 acres of which 95 percent is pervious and grass covered with 5 percent as impervious surfaces.
    a. **North Structural Fill Area**. Stormwater from the northern portion of the undeveloped area drains and is conveyed to the central trunk line.
    b. **Northwest Structural Fill Area.** Stormwater from the northwest corner of the undeveloped area drains and is conveyed into the municipal storm drain at the west discharge point.
    c. **Southwest Structural Fill Area.** Stormwater from the southwest corner of the undeveloped area drains from the pavement area and in the grass cover area via catch basins. Stormwater discharges to municipal drainage along Garden Avenue North at the southwest discharge point.

5. Surface Water Management

This section describes the regulatory framework for managing surface water at the Site. Stormwater is managed under the CAP (Ecology, 1991) and Industrial Stormwater General Permits (ISGP) for the Truck Plant, R&D, and Active facilities. Permits are provided in Appendix A and approximate ISGP coverage areas are shown on Figure 6.

5.1 PACCAR RENTON CLEANUP ACTION PLAN (ECOLOGY, 1991)

The CAP and supporting CMIP manages surface water at the Site by:

- Identifying COCs;
- Establishing CULs for surface water;
- Defining the point of compliance; and
- Requiring monitoring to determine if the cleanup goals have been achieved.

The CAP identified COCs for surface water as copper, hexavalent chromium, lead, nickel, and zinc. The CAP also required monitoring for arsenic, cPAHs, PCBs, and total petroleum hydrocarbons (TPH). Ecology requested that vinyl chloride be included in the initial surface water monitoring program.

The CAP set surface water CULs according to Washington Administrative Code 173-340-730 "Surface Water Cleanup Standards" based on chronic aquatic life criteria. A water hardness of 50 milligrams per liter (mg/L) $CaCO_3$ was used to determine CULs for metals. The CULs for surface water are provided in attached Table 2.

The surface water point of compliance in the CAP was defined as the "point or points where surface water collected from the PACCAR site are discharged" (Ecology, 1991, page 31). The surface water point of compliance was also identified in the CMIP as the site boundary where surface water leaves the Site. The CMIP specified that surface water quality data from sampling location (SW-5) was to be compared to the CULs. SW-5 represents surface water from the south half of the Site where the structural fill cover was present.

Monitoring surface water quality was required by the CAP and the monitoring program was specified in the CMIP. Monitoring was to continue until surface water quality met cleanup goals.

The CMIP provides a two-step process for comparing concentrations to the CULs. The first step is direct comparison of concentrations to the CULs. For constituent concentrations above the CUL, the second step would be to assess whether the applicable time-weighted average concentration (24-hour or 4-day period) exceeds the CULs.

If surface water concentrations exceed the CULs, the CMIP states the following actions will be taken:

- Additional testing to assess the cause of the exceedance. Prior to any testing, a sampling and analysis plan will be submitted to Ecology for review and approval.
- Additional remedial actions will be evaluated. The proposed remedial actions will be discussed with Ecology. Any remedial action may require public comment.

- To complete development of the south portion of the Site, stormwater discharge permits (Stormwater Pollution Prevention Plans under National Pollutant Discharge Elimination System) may be necessary. The monitoring program will be revised as appropriate to be consistent with these permits.

5.2 KENWORTH TRUCK PLANT

Stormwater discharge from the Truck Plant has been authorized under various Industrial Stormwater General Permits issued by Ecology since 1993. The Industrial Stormwater General Permit applies to facilities conducting industrial activities that discharges stormwater to a surface waterbody or to a storm sewer system that drains to a surface waterbody. The current permit (WAR000858) became effective on January 1, 2025, and expires on December 31, 2029. Quarterly surface water quality monitoring is required by the permit for zinc, copper, oil, grease, and petroleum hydrocarbons (diesel range organics and heavy oils).

The Truck Plant stormwater system collects stormwater from a series of catch basins and is conveyed to the north treatment facility detention pond and discharged off Site.

5.3 ACTIVE USA, INC.

Stormwater discharge from the Active facility is authorized under Industrial Stormwater General Permit #WAR124959. The initial permit was authorized in December 2011. The current permit became effective on January 1, 2025, and expires on December 31, 2029. Quarterly surface water monitoring is required by the permit for zinc, copper, oil, grease, and petroleum hydrocarbons (diesel range organics and heavy oils).

The Active surface water system collects stormwater from a series of catch basins and is conveyed to a bioswale/wet pond on the west side of the facility. Overflow from the pond is sent to the stormwater pipe on the west side of the Truck Plant (Figure 4).

5.4 RESEARCH AND DEVELOPMENT

Stormwater discharge from the R&D facility is authorized under Industrial Stormwater General Permit #WAR310881. The initial permit was authorized in September 2022. The current permit became effective on January 1, 2025 and expires on December 31, 2029. Quarterly surface water quality monitoring is required by the permit for zinc, copper, oil, grease, and petroleum hydrocarbons (diesel range organics and heavy oils).

The R&D facility stormwater system collects stormwater from a series of catch basins and is conveyed to the central trunk line located south of the Truck Plant.

5.5 PACCAR PARTS DISTRIBUTION WAREHOUSE

The PACCAR PDC facility does not require a stormwater permit at the present time because it has received a conditional no exposure (CNE) exemption from Ecology. The CNE #302428 is dated June 24, 2014.

6. Surface Water Quality Monitoring

This section summarizes the results of surface water quality monitoring at the Site. Surface water quality monitoring at the Site is required by the CAP (Ecology, 1991).

6.1 PACCAR RENTON CLEANUP ACTION PLAN (ECOLOGY, 1991)

6.1.1 Surface Water Sampling Program

Surface water monitoring has been carried out since 1998 in accordance the CMIP (DOF, 1997). The water quality is evaluated to determine whether the remedy is functioning as intended based on surface water quality results.

The CMIP initially required surface water monitoring for:

- Metals (arsenic, total and hexavalent chromium, copper, lead, nickel, and zinc);
- PCBs;
- Total petroleum hydrocarbons – diesel range (TPH-D);
- cPAHs; and
- Vinyl chloride.

6.1.2 Surface Water Monitoring Locations

The CMIP designated five surface sampling locations. Surface water sampling locations are shown on Figures 4 and 5 and are discussed below.

SW-DP. SW-DP is sampled at the outlet of the north treatment facility detention pond. Stormwater from this location is derived from the Truck Plant and associated parking lot and was included in the CMIP for "*informational purposes"* only. This was because stormwater is derived from paved surfaces associated with the truck plant and discharge is regulated under a stormwater discharge permit.

SW-3. SW-3 is located at the north discharge point. SW-3 represents treated and untreated surface water generated from the Site and the municipal storm drain which carries untreated stormwater northward across the Site from untreated off-site sources. This location is not identified as the point of compliance in the CMIP and is sampled for informational purposes only.

SW-5. Stormwater from the south half of the Site is sampled at a manhole designated SW-5. The CMIP specifies that water quality from SW-5 will be compared to cleanup levels for compliance purposes and represented (in 1991) runoff from the structural fill cover that covered contaminated soil. Currently, surface water at SW-5 is generated from the R&D, PACCAR PDC, and Active facilities, as well as a portion of the undeveloped area.

SW-6. SW-6 is sampled from a manhole which represents stormwater from the area where Building 17 was formerly located. Building 17 was demolished and removed from the Site in 2013 for construction of the PDC in 2015 and 2016. As part of the construction effort, the remaining preload fill material was moved to southwest of the undeveloped area and was reseeded to form a grass cover. Starting in 2020,

PACCAR used the southwest area to temporarily park trucks prior to customer delivery by Active. Currently, surface water at SW-6 contains runoff water from the preload fill material that overlays the northwest structural fill and the contaminated soil.

The surface water focus of the CMIP was the south half of the Site where the structural fill cover contained contaminated soil, which was the reason that SW-5 was identified as the surface water point of compliance. As noted above, other locations were sampled for informational purposes. The CMIP specifies that surface water monitoring will be performed for a minimum of five years or until all on-site media no longer exceed Site CULs.

6.1.3 Surface Water Monitoring Results

Surface water monitoring began in 1998 after completion of cleanup activities at the Site in 1997. Surface water sampling and analysis has been conducted semi-annually generally in March and October since 1997 through 2013, and annually since 2014. Samples are collected after a storm event that produces more than 0.1 inch of rainfall and occurs at least 72 hours after the last 0.01-inch rainfall event.

The surface water quality program was reviewed in 2004 (Hart Crowser, 2004) and during Ecology's periodic reviews in 2009, 2014, and 2021 (Ecology 2009, 2014, and 2021).

Hart Crowser (2004) summarized the results of surface water sampling between 1998 and 2004 as follows:

- Hexavalent chromium, nickel, and arsenic were detected at concentrations below the CULs.
- Copper, lead, and zinc concentrations have typically exceeded their respective CULs.
- Total chromium was slightly above the CUL of 0.011 mg/L on one occasion (October 2003 at 0.016 mg/L).
- PCBs have not been detected in Site samples except on one occasion at SW-3 (October 1999 at 0.056 micrograms per liter [μg/L], but below the CUL of 0.1 μg/L).
- Diesel- and heavy-oil range hydrocarbon concentrations were 2.4 and 5.9 mg/L or less, respectively. There are no surface water criteria for either constituent in the CAP or CMIP.
- Vinyl chloride is generally not detected, but has been encountered at concentrations ranging up to 2.6 μg/L. No evaluation criteria are provided in the CAP or CMIP.
- cPAH results are primarily non-detect. Of the detected concentrations, the majority are less than 1 μg/L. There are no criteria provided in the CMIP for evaluating cPAHs.

Based on these findings, surface water monitoring for arsenic, total chromium, nickel, PCBs, diesel- and heavy-oil range hydrocarbons, vinyl chloride, and cPAHs were discontinued in 2004. Monitoring for copper, lead, zinc, and hexavalent chromium continued.

The current surface water monitoring for metals (total copper, lead, and zinc; and hexavalent chromium) is conducted at five locations identified in the CMIP to assess whether any long-term changes are occurring. The surface water monitoring results are compared to the CMIP CULs and current Ecology stormwater benchmarks (Table 3).

Table 3. Surface Water Cleanup Levels and Benchmarks		
Constituent	**CUL (µg/L)**	**Benchmark (µg/L)**
Copper	7	14
Lead	1	64.6[1]
Zinc	47	117
Hexavalent chromium	11	--

Note:

1. The lead benchmark of 64.6 µg/L reflects the revised numeric benchmark in Washington's Industrial Stormwater General Permit, effective 2025.

The following discussion of surface water historical sampling is based on sampling since 2005 when post-construction conditions stabilized. Hexavalent chromium has not been detected since 2007 (in SW-MH only) in any of the surface water sampling locations and is not discussed further. Historical copper, lead, and zinc concentrations in surface water are summarized in Table 4 and presented in charts, a table, and a figure in Appendix B. The metal concentrations were compared to CULs and Industrial Stormwater General Permit benchmark values. The results for specific surface water sampling locations results (Table 4) and Mann-Kendall trend analysis (Table 5) are summarized below. The complete Mann-Kendall trend analyses are contained in Appendix C.

Table 4. Surface Water Quality Statistics - 2005 to 2024 (N=27)			
Location	**Geomean Copper (µg/L)**	**Geomean Lead (µg/L)**	**Geomean Zinc (µg/L)**
SW-MH	47.1	2.5	114.7
SW-3	2.9	0.5	34.2
SW-DP	2.3	0.5	64.9
SW-6	4.7	0.6	7.3
SW-5	3.6	0.7	23.7
CMIP Cleanup Level	7	1	47
Industrial Benchmarks	14	64.6	117

Notes:

(N) = number of samples

Data is summarized in Appendix Table B-1.

Values presented are geometric means, as the data are log-normally distributed. The geomean provides a more representative measure of central tendency for compliance evaluation by reducing the influence of occasional high results.

Table 5. Summary of Surface Water Trend Analysis - 2024			
Monitoring Well	**Copper**	**Lead**	**Zinc**
SW-MH	Decreasing	Decreasing	Decreasing
SW-3	Stable	Decreasing	Stable
SW-DP	Stable	Decreasing	Stable
SW-6	Stable	Probably Decreasing	No trend
SW-5	Probably Decreasing	Decreasing	Stable

SW-MH

SW-MH represents municipal stormwater coming onto the Site from off Site and upstream sources from the City of Renton. As mentioned previously, surface water from the Site does not drain into the municipal storm drain as it traverses the Site. SW-MH was included for information purposes to provide surface water quality analytical data of these off-site sources.

Copper (70 µg/L) and zinc (52 µg/L) concentrations detected in stormwater collected during the latest round of surface water sampling from SW-MH in December 2024 exceeded surface water CULs and the lead concentration (0.561 µg/L) was below the CUL. Historically, copper, lead, and zinc have generally been detected at concentrations above the CMIP CULs during most of the stormwater sampling events at SW-MH (Table 4). Copper and zinc concentrations are also generally above stormwater benchmarks. Copper, lead, and zinc concentrations appear to be statistically decreasing in SW-MH, based on the Mann-Kendall analysis (Table 5).

SW-3

SW-3 is located at the north discharge point. SW-3 represents treated and untreated surface water generated from the Site and the municipal storm drain, which carries untreated stormwater northward across the Site from untreated off-site sources. This location was sampled for informational purposes only and is not the point of compliance as it has comingled surface water from off-site sources from the City of Renton (SW-MH).

During the December 2024 surface water sampling event, copper (4.13 µg/L), zinc (42 µg/L), and lead (0.178 µg/L) were detected in stormwater collected from SW-3 at concentrations below surface water CULs.

Since 2005, only two water samples collected from SW-3 have detected copper concentrations exceeding the CMIP CUL of 7 µg/L (8.9 µg/L in 2015 and 12.6 µg/L in 2020). Lead concentrations generally have been detected below the CUL at concentrations ranging from 0.072 to 1 µg/L. However, in 2011, 2015, and 2019, lead concentrations were detected at concentrations of 2.2, 1.7, and 1.21 µg/L, respectively, just above the CMIP CUL of 1 µg/L. Since 2005, zinc concentrations have ranged from 5 to 131 µg/L with roughly half of the samples exceeding the CMIP CUL of 47 µg/L. All lead and copper concentrations and most zinc concentrations were below stormwater benchmarks. Copper and zinc concentrations appear statistically stable, and lead appears to be statistically decreasing in SW-3, based on the Mann-Kendall analysis. Surface water metal concentrations in samples from SW-3 are typically lower than the metal concentrations from SW-MH.

SW-DP

SW-DP is sampled at the outlet of the north treatment facility. Stormwater from this location is derived from the Truck Plant and associated parking lot and was included in the CMIP for informational purposes only.

During the most recent surface water sampling in December 2024, copper (1.28 µg/L), zinc (45.7 µg/L), and lead (0.1 µg/L) were detected in stormwater collected from SW-DP at concentrations below surface water CULs.

Since 2005, copper and lead concentrations have generally been detected below their respective CMIP CULs and have been below stormwater benchmarks. Zinc concentrations have been variable and generally above the CMIP CULs and a few instances above the stormwater benchmark. Copper and zinc concentrations appear statistically stable, and lead concentrations appear statistically decreasing, based on the Mann-Kendall analysis.

SW-6

SW-6 is sampled from a manhole which represents stormwater from the area where Building 17 was formerly located and where the current relocated preload and northwest structural fill is located.

During the last two surface water sampling events in October 2023 and December 2024, surface water within the manhole at SW-6 had turbidity readings of 630 and 207 nephelometric turbidity units (NTUs), respectively. Use of the drainage area for overflow parking for completed trucks from the Truck Plant appears to result in elevated turbidity and metal concentrations at this sampling location.

For the December 2024 sampling event, lead (1.57 µg/L) was detected at a concentration above the CUL and below the stormwater benchmark. Copper (6.77 µg/L) and zinc (8.37 µg/L) were detected at concentrations below CULs and stormwater benchmarks.

Since 2005, copper, lead, and zinc concentrations have generally been detected below CULs except between 2014 to 2017 during and right after construction of the PACCAR PDC completed in 2016. Copper concentration trends appear statistically stable, lead concentrations appear to be statistically probably decreasing, and there is statistically no apparent trend in zinc concentrations in SW-6, based on the Mann-Kendall analysis.

SW-5

Stormwater from the south half of the Site is sampled at a manhole designated SW-5. Currently, surface water at SW-5 is generated from the R&D, PACCAR PDC, and Active facilities, as well as a portion of the undeveloped area at the southwest corner of Site. The CMIP specifies that water quality from SW-5 will be compared with CULs for compliance purposes.

During the December 2024 surface water sampling event, copper (2.44 µg/L), lead (0.31 µg/L), and zinc (14.1 µg/L) were detected in surface water collected from SW-5 at concentrations below the surface water CUL.

Since 2005, copper, lead and zinc concentrations have not exceeded the CULs with a few exceptions. Sample concentrations were all below stormwater benchmarks. Between 2015 and 2017, some exceedances of CMIP CULs for copper, lead, and zinc concentrations occurred, and coincided with construction of the PACCAR PDC, which was completed in 2017. The zinc concentration exceeded the CUL in 2022. Other than during this period of construction disturbance, the surface cover has been effective at minimizing stormwater impacts based on surface water sampling at the point of compliance. Copper concentrations appear to be statistically decreasing, zinc concentrations appear statistically stable, and lead concentrations appear to be decreasing in SW-5, based on the Mann Kendall analysis.

Summary Statement

- In December 2024, upstream (off-Site) stormwater (SW-MH) exceeded CULs for copper and zinc, and the benchmark concentration for copper. Lead concentrations were below CUL and benchmark concentrations.
- In December 2024, stormwater concentrations of copper, lead, and zinc were below CULs and benchmarks at locations SW-3, SW-DP, SW-5, and SW-6, except in the sample from SW-6 where

lead exceeded its CUL (1.57 µg/L compared to the CUL of 1 µg/L). The lead concentration was below the benchmark of 64.6 µg/L.

- The lead concentration exceedance in the sample from SW-6 is attributed to the high turbidity observed in this sample, that appears to have been caused by the use of the unpaved SW-6 drainage area for overflow truck parking. Stormwater is eroding imported fill soil containing natural (background) concentrations of lead. Total lead is often detected in turbid water samples. The cause of the turbid water needs to be confirmed and addressed; either by ceasing truck parking activities and/or implementing administrative controls such as localized treatment measures (e.g., bollards, grass, hay bales, silt sock).
- As summarized in Table 4 above, the geometric mean concentrations of copper and lead samples in PACCAR stormwater collected since 2005 are below CULs and benchmark values. The geometric mean concentration for zinc at SW-DP exceeds its CUL (64.9 µg/L compared to 47 µg/L) but is below its benchmark value (117 µg/L). It should be noted that stormwater from SW-DP mixes with other stormwater at SW-3, and that metal geometric mean concentrations at the SW-3 location are below CUL values.

7. Response to Ecology's Comments from the 2021 Periodic Review

Ecology's comments regarding surface water during the 2021 Periodic Review (italicized text) are addressed in this section.

The conditional point of compliance for surface water is the point or points where surface collected from the Site is discharged across the property boundary, whether through surface ditches or storm drains. Ecology identified three conditional surface water sampling locations for the Site SW-3, SW-5, and SW-6.

- The CAP and CMIP state that the point of compliance is where surface water leaves the Site. For determining compliance with CULs, the CMIP selected SW-5, which receives stormwater from the southern portion of the Site. SW-5 was selected because the north half of the Site was developed for the Truck Plant. The Truck Plant has a separate stormwater management system regulated by an Industrial Stormwater General Permit.

Ecology noted that surface water CULs for copper, hexavalent chromium, lead, and zinc have not been consistently achieved in stormwater sampling locations SW-3, SW-5, and SW-6.

- Surface water sampling locations SW-3 and SW-5 are under the Industrial Stormwater General Permits for each facility and should no longer be monitored as part of this program. Stormwater benchmarks have been achieved within the last five years, with one exception:
  - In 2020, zinc exceeded its stormwater benchmark (117 μg/L) at SW-3 with a concentration of 131 μg/L, upgradient SW-MH measured 140 μg/L, indicating off-Site comingled municipal stormwater influence.
- We recommend continued monitoring at sample location SW-6 to monitor the undeveloped area of the Site.

Per the CAP, monitoring must continue as long as contaminants are present above MTCA CULs for soil, groundwater and surface water.

- The CAP (page 58-59) states that "monitoring will continue until residual hazardous substance concentrations in all media on-site no longer exceed site cleanup levels." Since groundwater CULs currently exceed Site cleanup levels, surface water monitoring must continue; however, we recommend monitoring only SW-6, as the other monitoring locations are under Industrial Stormwater General Permits for each facility.

The cause of the elevated metals in stormwater must be evaluated per the Contingency Plan in the CMIP.

- All impacted soils are covered with buildings, pavement or clean fill material. Surface water does not come into contact with impacted soil. Sporadic exceedances of metal concentrations above the CULs in SW-5 have occurred, but there is no consistent trend in metal concentrations. Exceedances can be attributed to construction activities and ongoing operations at facilities at the Site. Sporadic exceedances which occurred do not represent an ongoing deterioration in environmental protection at the Site.

Trend analysis and time-series plots needs to be incorporated into future monitoring events, including a detailed discussion of results need to be incorporated in future monitoring reports. Monitoring reports should incorporate data interpretation, compliance with cleanup standards, historical stormwater data, conclusions, and recommendations.

- Trend analysis, time-series plots, and compliance with CULs have been incorporated into the annual reports.

The site includes swales, rain gardens, and unpaved grassy areas. While the stormwater infiltration areas are best management practices (BMPs) for stormwater management, a potential concern is stormwater infiltration to groundwater in areas where there is remaining contaminated soils or stabilized soil cells that are not covered by pavement or buildings. This could potentially increase leaching of soil contaminants into groundwater in those areas, which should be evaluated and mitigated.

- Water quality downgradient of the stabilized soil cells are monitored periodically, with monitoring locations shown on Figure 7. No impacts to groundwater downgradient of the BMPs attributed to impacted or stabilized soil cells have been identified, as summarized in Table 6. Stormwater leaching to groundwater is not a significant risk.

8. Conclusions and Recommendations

This section presents conclusions and recommendations for surface water management at the Site.

1. The soil cleanup actions completed at the Site are protective of human health and environment (Ecology 2009, 2014, 2021) because a protective cover consisting of structural fill, pavement, or buildings were installed over all treated and untreated soils above cleanup levels. Furthermore, as outlined in the June 20, 2014, email from Ecology to PACCAR, Ecology concurred that the southwest corner of the Site meets cleanup levels (regarding sample location SW Discharge Point).
2. Surface water quality standards were generally met at the point of compliance (SW-5 and SW-6) between 2004 and 2024. Exceedances can be attributed to construction activities and ongoing operations at facilities at the Site. Sporadic exceedances which occurred do not represent an ongoing deterioration in environmental protection at the Site.
3. With the CNE exemption at the PDC facility, 78 percent of the Site is regulated by Industrial Stormwater General Permits that include surface water monitoring. Based on these considerations, continued long-term surface water monitoring at sample locations SW-MH, SW-3, SW-DP, and SW-5 is not warranted and should be discontinued. This is consistent with the CMIP as the previous point of compliance (SW-5) was historically assessing stormwater from unpaved areas where it was assumed the structural fill cover was placed over soil that exceeded cleanup levels. This is no longer the case at the Site.
4. Haley & Aldrich recommends that the southwest area of the undeveloped area be reseeded with grass and remove any truck storage in this area to remove potential turbidity in the surface water at sample location SW-6. Surface water monitoring at sample location SW-6 should continue until it can be demonstrated that potential turbidity issues have been resolved.
5. Haley & Aldrich recommends removing hexavalent chromium from the surface water analyses list based on hexavalent chromium not being detected at or above laboratory reporting limits at the Site (facility and undeveloped areas) since 2007.

9. Limitations

Work for this project and report preparation was performed in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time that the work was performed. This report is for the specific application to the referenced project and for the exclusive use of PACCAR, Inc. No other warranty, express or implied, is made.

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TABLES

TABLE 1

AREA OF PERVIOUS AND IMPERVIOUS SURFACES

PACCAR

RENTON, WASHINGTON

	Pervious Surfaces		Impervious Surfaces		Total Area		Percent Area	
Area Name	**Square Feet**	**Acres**	**Square Feet**	**Acres**	**Square Feet**	**Acres**	**Pervious**	**Impervious**
West Discharge Point	**96,664**	**2.22**	**1,605**	**0.04**	**98,269**	**2.26**	**98%**	**2%**
Northwest Structural Fill Area	96,664	2.22	1,605	0.04	98,269	2.26	98%	2%
Southwest Discharge Point	**247,417**	**5.68**	**34,294**	**0.79**	**281,711**	**6.47**	**88%**	**12%**
Southwest Structural Fill Area	247,417	5.68	34,294	0.79	281,711	6.47	88%	12%
Northeast Discharge Point	**41,407**	**0.95**	**95,156**	**2.18**	**136,564**	**3.14**	**30%**	**70%**
Northeast Truck Plant Parking	41,407	0.95	95,156	2.18	136,564	3.14	30%	70%
North Discharge Point	**921,671**	**21.16**	**2,191,318**	**50.31**	**3,112,989**	**71.46**	**30%**	**70%**
North Structural Fill Area	421,114	9.67	2,054	0.05	423,168	9.71	100%	0%
Active USA Inc., (Active) Facility	34,917	0.80	216,912	4.98	251,829	5.78	14%	86%
Research and Development (R&D)	43,887	1.01	193,381	4.44	237,268	5.45	18%	82%
Main Truck Plant Parking	142,212	3.26	275,401	6.32	417,613	9.59	34%	66%
Truck Plant	166,923	3.83	1,157,125	26.56	1,324,048	30.40	13%	87%
Parts Distribution Center (PDC)	112,618	2.59	346,445	7.95	459,063	10.54	25%	75%
Summary by Areas								
Structural Fill Areas	765,195	17.57	37,953	0.87	803,148	18.44	95%	5%
Truck Plant + Parking Lot Area	350,542	8.05	1,527,682	35.07	1,878,224	43.12	19%	81%
Active, R&D, and PDC Areas	191,422	4.39	756,739	17.37	948,161	21.77	20%	80%
Total PACCAR Renton	**1,307,159**	**30.01**	**2,322,373**	**53.31**	**3,629,532**	**83.32**	**36%**	**64%**

Industrial Stormwater General Permit vs No Permit Coverage Areas	**Total Area**		**Percent Area**
	Square Feet	**Acres**	
Areas Covered by Permit or Conditional No Exposure (CNE) Exemption -Truck Plant, Parking Lot Areas, Active, R&D, and PDC (CNE Exempt)	2,826,385	64.88	78%
Areas Not Covered by Permit -Structural Fill Areas	803,148	18.44	22%

TABLE 2

CLEANUP ACTION PLAN SURFACE WATER COCs AND CULs

PACCAR

RENTON, WASHINGTON

Constituent	CUL (mg/L)	Basis
Arsenic	0.048	24-hr average
Chromium (VI)	0.011	4-day average
Copper	0.001	4-day average
Lead	0.007	4-day average
Nickel	0.056	24-hr average
Zinc	0.047	24-hr average
cPAHs	NA	--
PCBs	0.0001	24-hr average
TPH	NA	--
Vinyl Chloride	NA	--

Notes

CMIP = Confirmational Monitoring and Inspection Plan

COCs = Constituents of concern

CULs = Cleanup levels

based on Confirmational Monitoring and Inspection Plan (CMIP, 1997)

TABLE 6
SUMMARY OF STABILIZED CELL WELLS GROUNDWATER ANALYTICAL RESULTS
PACCAR RENTON
RENTON, WASHINGTON

Well	Date	Sample Type	Total Arsenic in ug/L		Diss. Arsenic in ug/L		Diss. Lead in ug/L		Diss. Chromium in ug/L		Vinyl chloride in ug/L		Ferrous Iron[a] in ug/L		Temp. in °C	pH	Dis. Oxygen in mg/L	Cond. in uS/cm	Redox Potential in mV	Turbidity in NTU	TSS in ug/L
CUL:			5		5		5		80		0.4		NE		NE	NE		NE	NE	NE	NE
HSAL:			50		50		50		100		2		NE		NE	NE		NE	NE	NE	NE
SC-01S																					
	3/25/98	N	-		**4.4**		**2.2**		10	U	-		-		-	-	-	-	-	-	-
	10/21/98	N	-		**3.4**		**1.4**		5	U	-		-		-	-	-	-	-	-	-
	3/7/99	N	-		**4.7**		1	U	10	U	-		-		-	-	-	-	-	-	-
	10/20/99	N	-		**5.8**		1	U	10	U	-		-		**17.2**	**8.2**	-	**190**	-	-	-
	5/24/00	N	-		**5**		1	U	0.5	U	-		-		**13**	**7**	-	**740**	-	-	-
	3/15/01	N	-		**5.2**		1	U	0.5	U	-		-		**13**	**6.8**	-	**620**	-	**0.13**	-
	3/20/02	N	-		**5.8**		1	U	0.5	U	-		-		**12**	**7.2**	-	**860**	-	**0.15**	-
	4/4/03	N	-		**4.9**		1	U	0.5	U	-		**600**		**13.8**	**8.1**	**2.60**	**107**	-	**26**	-
	4/1/04	N	-		**5.4**		-		-		-		**43**		**12.4**	**8.2**	**0.19**	**119**	**162**	**13**	**4900**
	4/12/05	N	-		**5.1**		-		-		-		40	U	**12.7**	**8**	**0.15**	**123**	**-42**	**1**	**1900**
	3/29/06	N	-		**4.7**		-		-		-		40	U	**12.8**	**7.74**	**0.32**	**97**	**-49**	**0**	**1800**
	3/29/07	N	-		**4.6**		-		-		-		40	U	**12.9**	**7.06**	**0.20**	**118**	**93**	**0**	**2900**
	3/13/13	N	**4.6**		-		-		-		-		**46**		**11.72**	**8.73**	**0.09**	**105.7**	**70**	**9.3**	**3300**
	6/20/19	N	-		-		-		-		0.2	U	-		**16.2**	**7.86**	**9.64**	**131.6**	**166.3**	**3**	-
	8/13/20	N	**5.15**		-		-		-		-		-		**16.2**	**7.86**	**9.64**	**131.6**	**166**	**3**	-
SC-02S																					
	3/26/98	N	-		**4.5**		1	U	10	U	-		-		-	-	-	-	-	-	-
	3/26/98	FD	-		**4.9**		1	U	10	U	-		-		-	-	-	-	-	-	-
	10/21/98	N	-		**4**		1	U	5	U	-		-		-	-	-	-	-	-	-
	10/21/98	FD	-		**4.4**		1	U	5	U	-		-		-	-	-	-	-	-	-
	3/7/99	N	-		**2.6**		1	U	10	U	-		-		-	-	-	-	-	-	-
	3/7/99	FD	-		**3.4**		1	U	10	U	-		-		-	-	-	-	-	-	-
	10/20/99	N	-		**4.7**		1	U	10	U	-		-		**16.5**	-	-	-	-	-	-
	5/24/00	N	-		**4**		1	U	2	U	-		-		**14**	**7.1**	-	**610**	-	-	-
	3/15/01	N	-		**4.1**		1	U	**2**		-		-		**13**	**6.3**	-	**810**	-	**0.17**	-
	3/15/01	FD	-		**4**		1	U	**2**		-		-		-	-	-	-	-	-	-
	3/20/02	N	-		**5.7**		1	U	**3.9**		-		-		**12**	**6.7**	-	**790**	-	**0.13**	-
	3/20/02	FD	-		**5.8**		1	U	**3.8**		-		-		-	-	-	-	-	-	-
	4/4/03	N	-		**3.2**		1	U	**2**		-		**4200**		**13**	**7.3**	**1.04**	**340**	-	**21**	-
	4/1/04	N	-		**4.9**		-		-		-		**36500**		**12.7**	**6.17**	**0.03**	**386**	**66**	**18**	**23200**
	3/13/13	N	**3.3**		-		-		-		-		**34800**		**12.85**	**8.61**	**0.05**	**361**	**115**	**22.5**	**1400**
	6/21/19	N	-		-		-		-		0.2	U	-		**13.5**	**6.15**	**0.67**	**476.7**	**-103**	**9.4**	-
	8/13/20	N	**3.65**		-		-		-		-		-		**13.5**	**6.15**	**0.67**	**476.7**	**-103**	**9.4**	-

Notes:

[a] Ferrous iron collected in April 2003 were field measurements using HACH kit. Other samples were analyzed in the laboratory using EPA Method SM 3500.

- : Sample not analyzed for specific analyte

J : Estimated value

U : Not detected at the detection limit noted

°C : degrees Celsius

CUL : Cleanup level

HSAL: Hot spot action level

mg/L : milligrams per liter

mV : millivolts

NE : Not established

NTU : nephelometric turbidity unit

TSS : Total suspended solids

ug/L : micrograms per liter

uS/cm : microsiemens per centimeter

***Bold** denotes a detected concentration*

Blue shading: Exceeded Cleanup Level

Green shading: Exceeded Hot Spot Action Level

FIGURES

STREAM SOURCE: CITY OF RENTON
MAP SOURCE: ESRI
SITE COORDINATES: 47°29'32"N, 122°11'50"W

HALEY ALDRICH

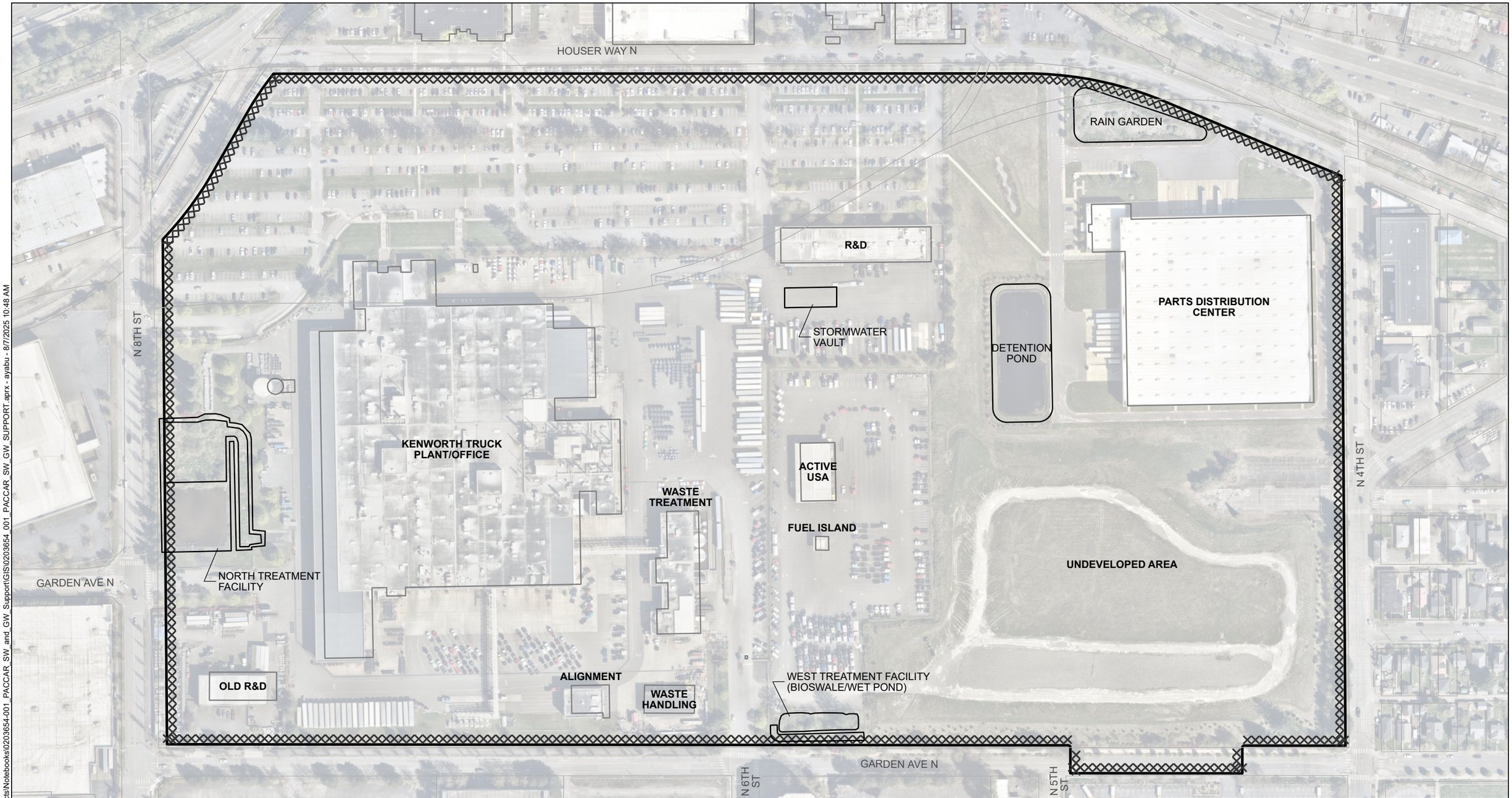
PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

VICINITY MAP

APPROXIMATE SCALE: 1 IN = 2000 FT
AUGUST 2025

FIGURE 1

GIS: \\haleyaldrich.com\share\sea_projects\Notebooks\0203654-001_PACCAR_SW_and_GW_Support\GIS\0203654_001_PACCAR_SW_GW_SUPPORT.aprx - ayabu - 8/14/2025 9:21 AM



LEGEND

- STORMWATER TREATMENT FACILITY
- BUILDING / STRUCTURE
- NPL SITE BOUNDARY (DEFINED BY DECREE DATED 1991 AND REVISION DATED 1994)
- PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. BASE MAP PREPARED FROM SURVEY INFORMATION PROVIDED BY TRIAD, APRIL 2004
3. ASSESSOR PARCEL DATA SOURCE: KING COUNTY
4. AERIAL IMAGE SOURCE: NEARMAP, APRIL 15, 2025

N

0 200 400

SCALE IN FEET

HALEY ALDRICH

PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

NPL SITE BOUNDARY AND SITE FEATURES MAP

AUGUST 2025

FIGURE 2

GIS: \\haleyaldrich.com\share\sea_projects\Notebooks\0203654-001_PACCAR_SW_and_GW_Support\GIS\0203654_001_PACCAR_SW_GW_SUPPORT.aprx - ayabu - 8/7/2025 10:48 AM

I-405 FWY

HOUSER WAY BYPASS

HOUSER WAY N

N 8TH ST

N 4TH ST

GARDEN AVE N

N 6TH ST

N 5TH ST

R&D

KENWORTH TRUCK PLANT/OFFICE

WASTE TREATMENT

ACTIVE USA

FUEL ISLAND

STORMWATER DETENTION POND

PARTS DISTRIBUTION CENTER

SOUTHERN BOUNDARY OF TREATED SOIL

NFA SOILS CLOSED AREA

UNDERDEVELOPED AREA

OLD R&D

ALIGNMENT

WASTE HANDLING

LEGEND

- BUILDING
- PERVIOUS SURFACE
- IMPERVIOUS SURFACE
- AREA PROTECTED BY EITHER BUILDINGS, ASPHALT, OR SOIL

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: NEARMAP, APRIL 15, 2025

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SCALE IN FEET

HALEY ALDRICH

PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

LOCATION OF PERVIOUS AND IMPERVIOUS AREAS

AUGUST 2025

FIGURE 3

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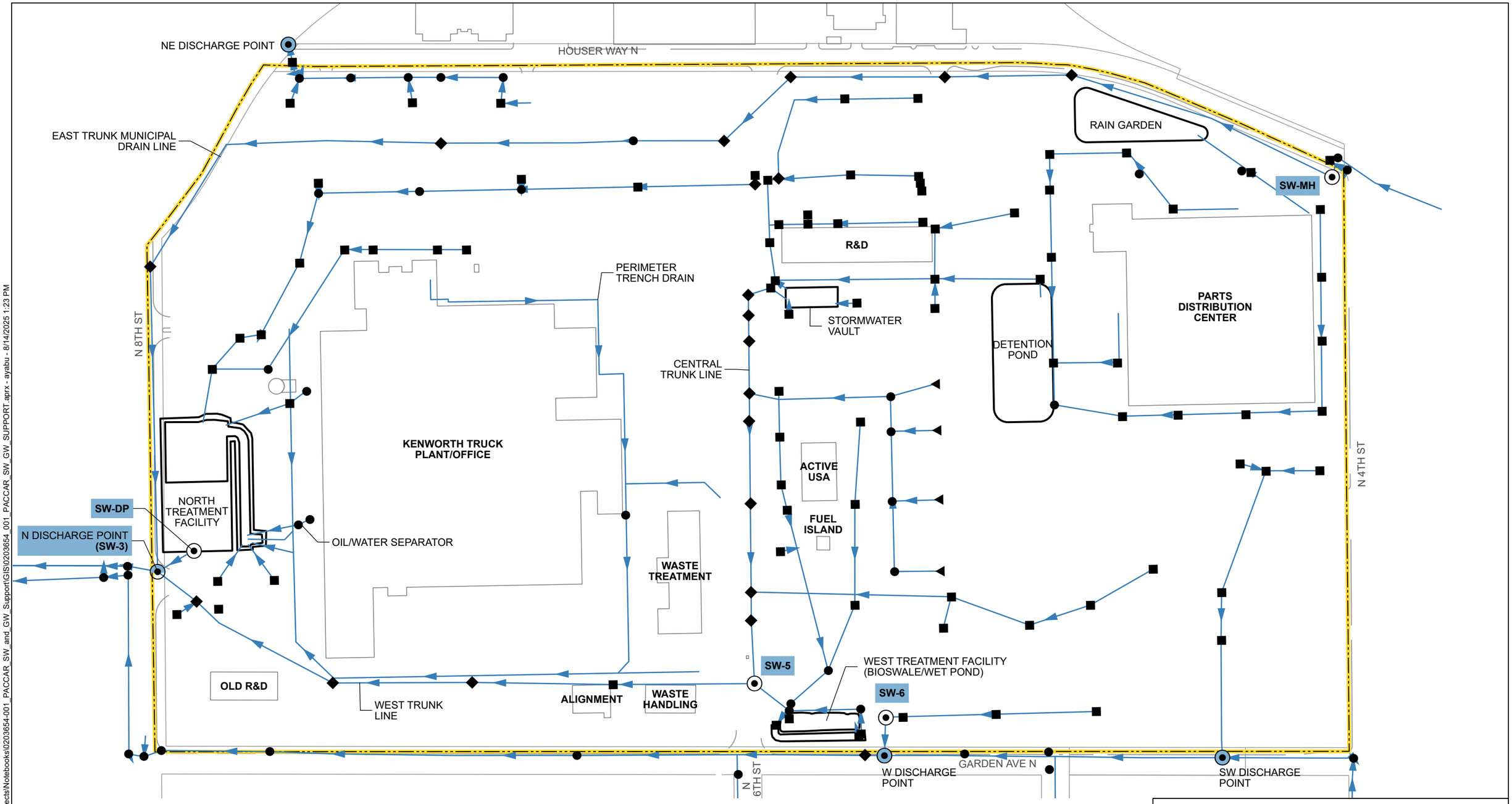


LEGEND

- DISCHARGE POINT
- SURFACE WATER SAMPLE LOCATION
- DISCHARGE POINT / SURFACE WATER SAMPLE LOCATION
- MANHOLE AND CLEANOUT
- CATCH BASIN
- SQUARE COVER
- GRATED DRAIN
- STORM DRAIN FLOW AND DIRECTION
- STORMWATER TREATMENT FACILITY
- BUILDING
- SITE BOUNDARY
- PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

N

0 200 400

SCALE IN FEET

HALEY ALDRICH

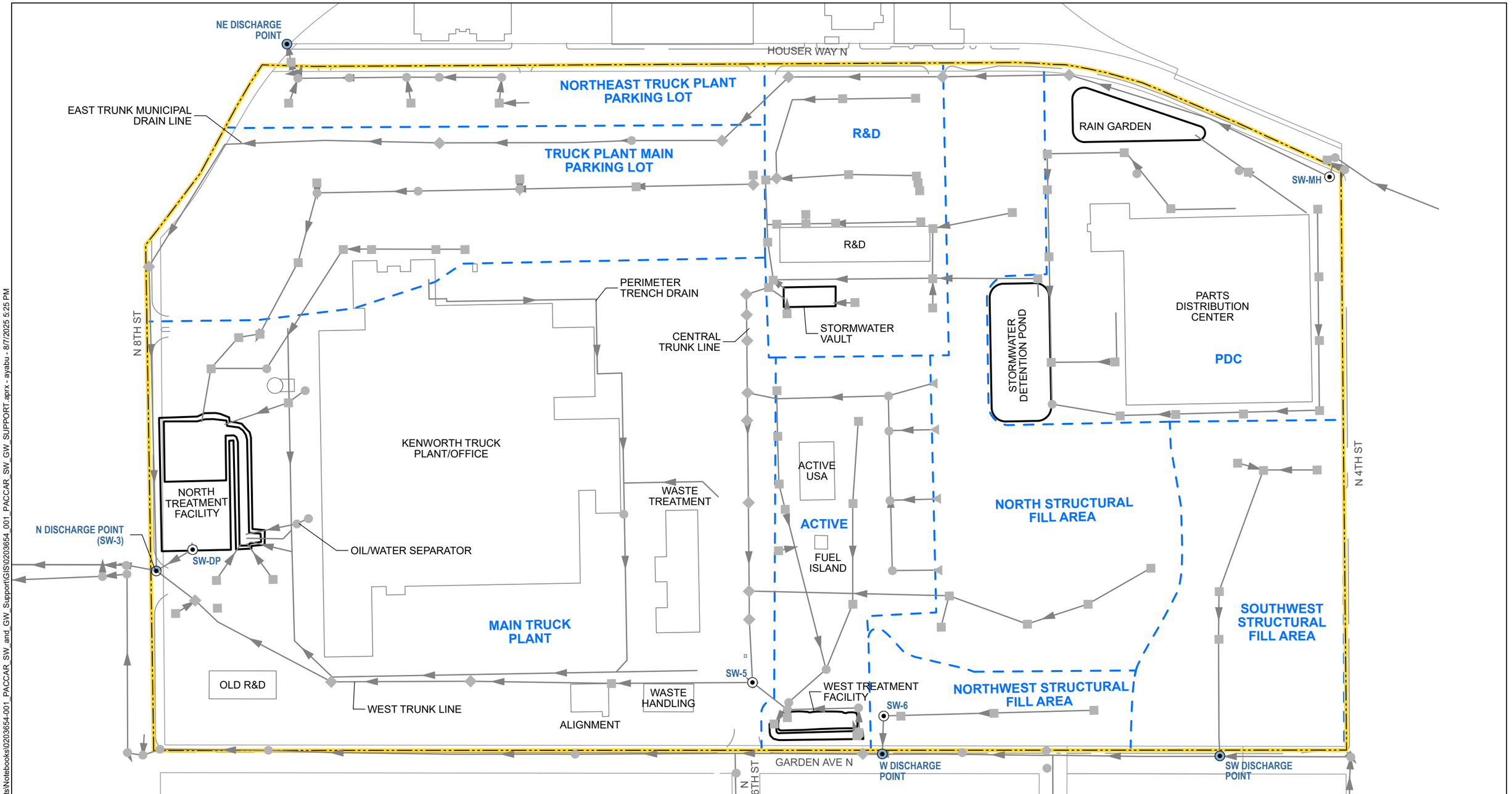
PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

SURFACE WATER DRAINAGE PLAN

AUGUST 2025

FIGURE 4

GIS: \\haleyaldrich.com\share\sea_projects\Notebooks\0203654-001_PACCAR_SW_and_GW_Support\GIS\0203654_001_PACCAR_SW_GW_SUPPORT.aprx - ayabu - 8/14/2025 1:23 PM



LEGEND

- DISCHARGE POINT
- SURFACE WATER SAMPLE LOCATION
- DISCHARGE POINT / SURFACE WATER SAMPLE LOCATION
- MANHOLE AND CLEANOUT
- CATCH BASIN
- SQUARE COVER
- GRATED DRAIN
- STORM DRAIN FLOW AND DIRECTION
- SURFACE WATER DRAINAGE AREA BOUNDARY WITH **AREA NAME**
- STORMWATER TREATMENT FACILITY
- BUILDING
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

N

0 200 400
SCALE IN FEET

HALEY ALDRICH

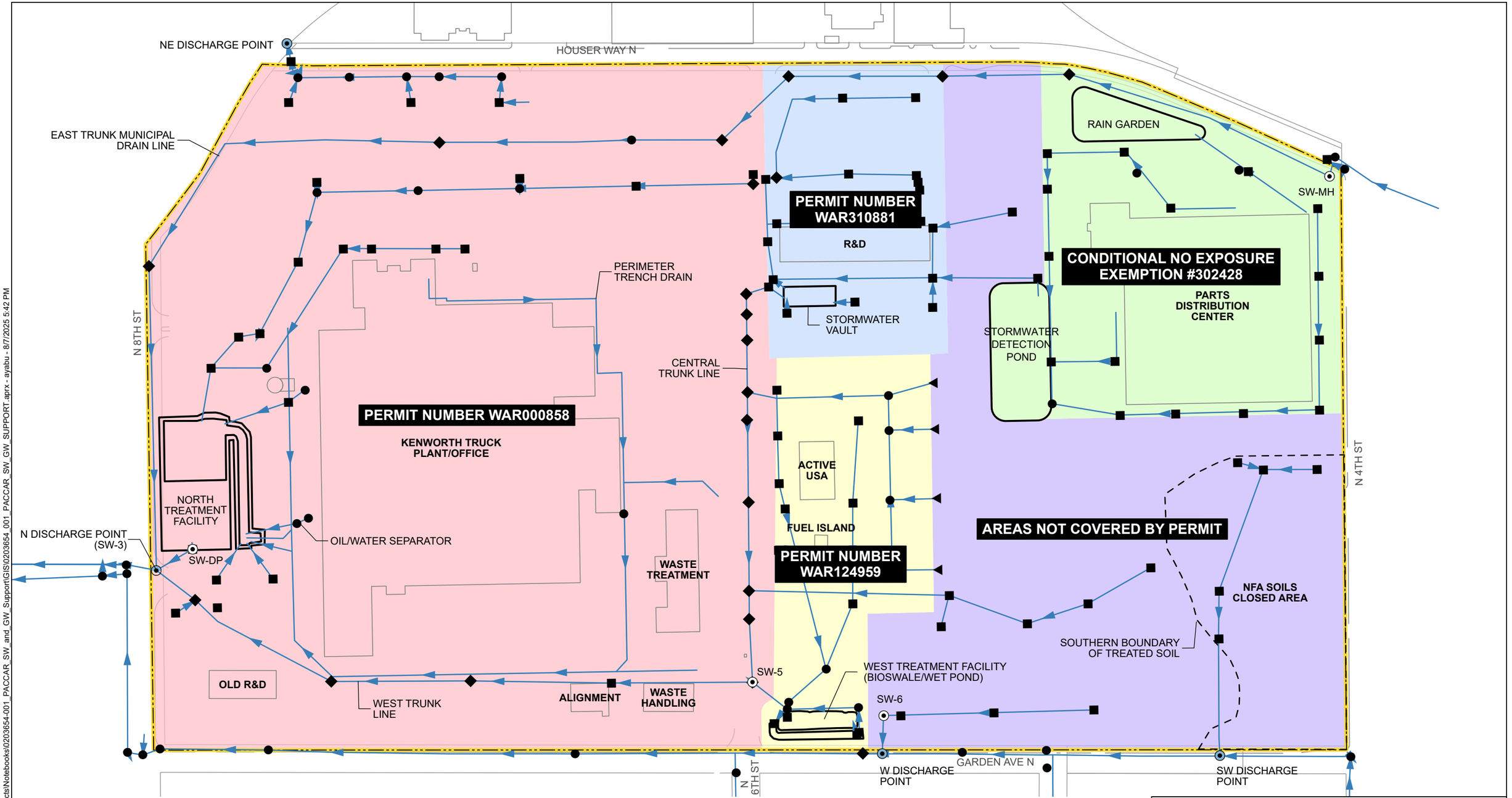
PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

SURFACE WATER DRAINAGE AREAS AND DISCHARGE LOCATIONS

AUGUST 2025

FIGURE 5

GIS: \\haleyaldrich.com\share\sea_projects\Notebooks\0203654-001_PACCAR_SW_and_GW_Support\GIS\0203654_001_PACCAR_SW_GW_SUPPORT.aprx - ayabu - 8/7/2025 5:25 PM



LEGEND

- DISCHARGE POINT
- SURFACE WATER SAMPLE LOCATION
- DISCHARGE POINT / SURFACE WATER SAMPLE LOCATION
- MANHOLE AND CLEANOUT
- CATCH BASIN
- SQUARE COVER
- GRATED DRAIN
- STORM DRAIN FLOW AND DIRECTION
- STORMWATER TREATMENT FACILITY
- BUILDING
- SITE BOUNDARY
- PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

0 200 400
SCALE IN FEET

HALEY ALDRICH

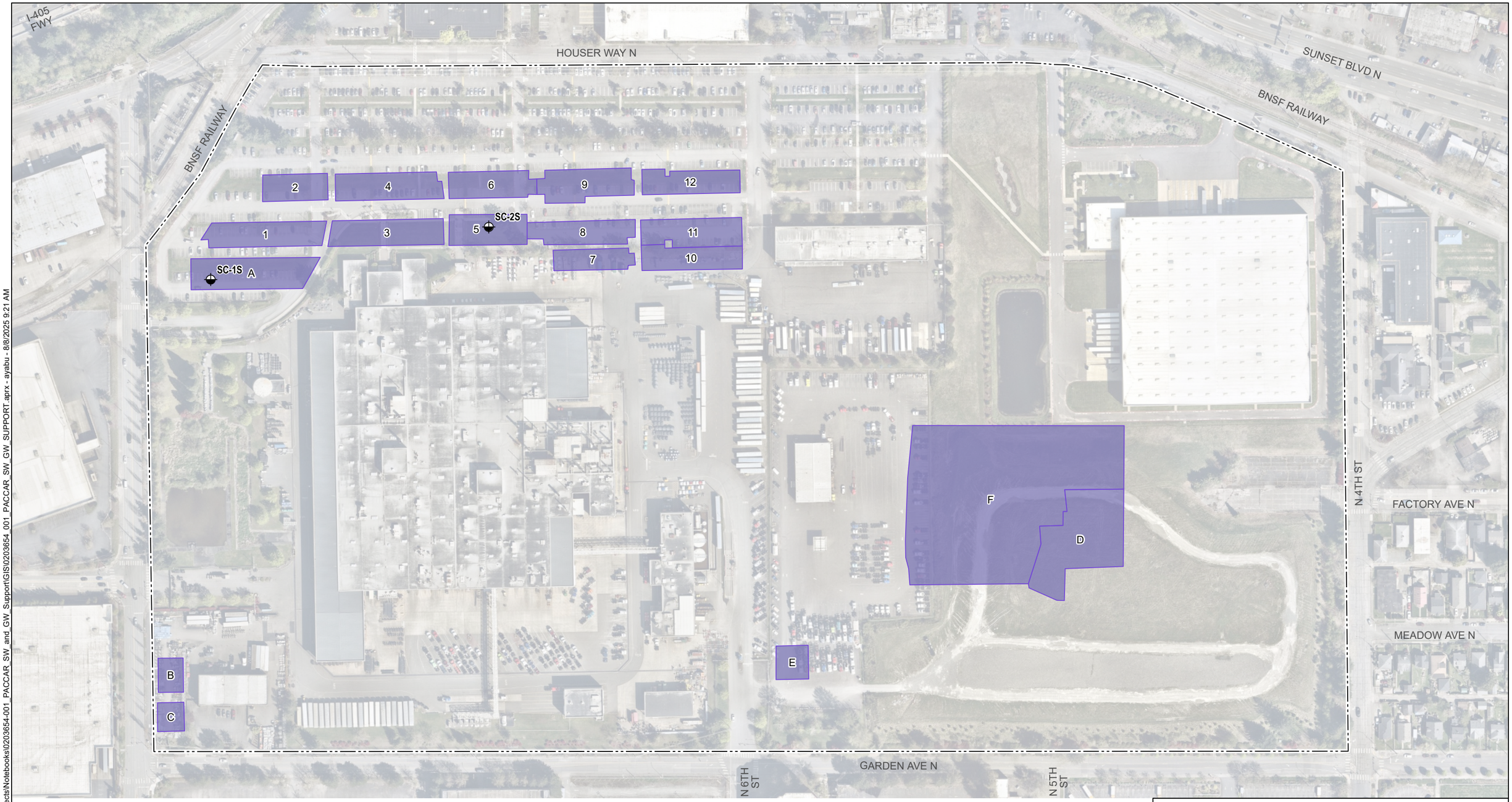
PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

INDUSTRIAL STORMWATER GENERAL PERMIT COVERAGE AREAS

AUGUST 2025

FIGURE 6

GIS: \\haleyaldrich.com\share\sea_projects\Notebooks\0203654-001_PACCAR_SW_and_GW_Support\GIS\0203654_001_PACCAR_SW_GW_SUPPORT.aprx - ayabu - 8/7/2025 5:42 PM



LEGEND

- PIEZOMETER
- SOLIDIFIED SOIL CELL LOCATION AND DESIGNATION
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGE SOURCE: NEARMAP, APRIL 15, 2025

N

0 200 400

SCALE IN FEET

HALEY ALDRICH

PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

STABILIZED SOIL CELLS LOCATION MAP

AUGUST 2025

FIGURE 7

GIS: \\haleyaldrich.com\share\sea_projects\Notebooks\0203654-001_PACCAR_SW_and_GW_Support\GIS\0203654_001_PACCAR_SW_GW_SUPPORT.aprx - ayabu - 8/8/2025 9:21 AM

APPENDIX A
Industrial Stormwater General Permits

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

December 3, 2024

Bob Aponte
Active USA LLC
540 Garden Ave N
Renton, WA 98057-5520

WAR124959
Active USA LLC
540 GARDEN AVE N
RENTON, WA 98057

RE: Coverage under the Industrial Stormwater General Permit: WAR124959

Dear Bob Aponte:

On December 2, 2024, the Washington State Department of Ecology (Ecology) reissued the Industrial Stormwater National Pollutant Discharge Elimination System and State Waste Discharge General Permit (ISGP). The permit becomes effective on January 1, 2025, and expires December 31, 2029. This is your permit coverage letter for Permit Number WAR124959, effective January 1, 2025. Retain this letter with a copy of the permit and Stormwater Pollution Prevention Plan (SWPPP). It is the official record of permit coverage for your site. For easy access from your site, you may keep your records in an accessible electronic format.

Permit Overview
The new ISGP has a number of changes. The changes are summarized in the fact sheet and Appendix C Addendum to Fact Sheet. You can find copies of the new Industrial Stormwater General Permit, permit forms, and other information at ecology.wa.gov/IndustrialStormwaterPermit.

Discharge Monitoring Reports and Site-Specific Monitoring Requirements
The ISGP requires you to submit quarterly discharge monitoring reports (DMRs) electronically using Ecology's secure online system, WQWebDMR. Find step-by-step instructions on how to register for WQWebDMR and the WQWebDMR User Guide at ecology.wa.gov/programs/wq/permits/paris/webdmr.html If you have questions about using WQWebDMR, contact the Water Quality Information Technology Help Desk at 360-407-7097 or email WQWebPortal@ecy.wa.gov.

We are currently updating our Permit and Reporting Information System (PARIS) database with the site-specific monitoring requirements of the new ISGP, based on the renewal application you submitted earlier this year. We will send you an additional site-specific monitoring summary page with more information after we have finished setting up your monitoring requirements and DMRs in the PARIS database. We will send you this monitoring summary page as soon as possible to support your collection of samples and submitting the first DMR of the permit cycle, due on May 15, 2025.

Permit Fees
State law (RCW 90.48.465) requires that all permittees pay an annual permit fee based upon the state fiscal year. The state fiscal year begins each year on July1 and ends on June 30 the following year. Ecology sends permit fee invoices to all permittees annually. Permittees who have permit coverage on or after July 1 will receive a permit fee invoice for coverage during that state fiscal year. If you would like more information on the permit fee process, visit Ecology's Water Quality Permit Fees webpage (ecology.wa.gov/WQFees) or email the Fee Unit at wqfeeunit@ecy.wa.gov.

Your Right to Appeal
You have a right to appeal the final general permit and general permit coverage for a specific facility to the Pollution Control Hearings Board. Appeals of general permit coverage must be filed within 30 days of the receipt of this coverage letter, where "date of receipt" is defined in RCW 43.21B.001(2). Any appeal is limited to the general permit's applicability or non-applicability to a specific discharger.

The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. For more information regarding your right to appeal, view Appeal of a General Permit Coverage, apps.ecology.wa.gov/publications/SummaryPages/1710007.html.

Permit Administration Assistance
If you have questions regarding your application, updating permit information, finding or completing permit forms, permit transfers or termination, or drafting public notices please contact your permit administrator Alyssa Brewer, ALYB461@ecy.wa.gov, (564) 669-4922.

Ecology Regional Inspector Assistance
If you have questions regarding stormwater management issues at your facility, please contact your regional inspector Amy Jankowiak, ajan461@ecy.wa.gov, (425) 429-4259.

Questions or Additional Information
Ecology is here to help. Please review our permit webpage at ecology.wa.gov/IndustrialStormwaterPermit. If you have any questions about the interpretation or implementation of the new ISGP, please contact Shannon McClellan, Shannon.McClellan@ecy.wa.gov, 360-280-8370.

Sincerely,

Jeff Killelea, Manager
Permit and Technical Services Section
Water Quality Program

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 3, 2014

Trevin Raak
Terminal Manager
Active USA LLC
540 Garden Ave N
Renton, WA 98057-5520

Facility Name: Active USA LLC
Location: 540 GARDEN AVE N
Renton, WA 98057
Permit No: WAR124959
County: King

RE: Reissuance of Coverage under the Industrial Stormwater General Permit

Dear Trevin Raak:

The Washington Department of Ecology (Ecology) has reissued the Industrial Stormwater General Permit (permit). A copy of your new permit is enclosed. **Retain this letter with your permit and Stormwater Pollution Prevention Plan. It is the official record of permit coverage for your facility.** Ecology issued the final permit December 3, 2014 and it becomes effective January 2, 2015.

Permit Overview
The new permit has a number of changes. The most significant changes are summarized in the enclosed "Summary of Changes" table. You can find more information on Ecology's website at: http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html. Please contact Ecology if you have any questions.

New Reporting Requirements
Beginning in 2015, you must submit Discharge Monitoring Reports and Annual Reports electronically, using Ecology's Water Quality Permitting Portal– Permit Submittals application, unless a waiver from electronic reporting has been granted. You can find more information regarding Ecology's Water Quality Permitting Portal on our website at: http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html.

If you have technical questions regarding Ecology's Water Quality Permitting Portal, please contact the portal staff at (800) 633-6193/option 3 or email WQWebPortal@ecy.wa.gov.

Site Specific Monitoring Requirements
Enclosed is a summary of the monitoring requirements for your facility. This summary is based on the best information available to Ecology about your facility. If you believe there is a discrepancy between what the permit requires and the enclosed summary, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the summary, the permit requirements take precedence.

Permit No: WAR124959
Facility Name: Active USA LLC
Location: 540 GARDEN AVE N
Renton, WA 98057
SIC Codes: 4213

Summary of Your Facility's ISGP Monitoring Requirements

This summary is based on the best information available to Ecology about your facility. If you believe there is a discrepancy between what the permit requires and the enclosed summary, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the summary, the permit requirements take precedence.

Benchmarks and Sampling Requirements Applicable to All Facilities (Condition S5, Table 2)

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level[1]
Turbidity	NTU	25	EPA 180.1 Meter	0.5
pH	SU	Between 5.0 - 9.0	Meter/Paper[2]	±0.5
Oil Sheen	Yes/No	No visible oil sheen	N/A	N/A
Copper, Total	µg/L	Western WA: 14 Eastern WA: 32	EPA 200.8	2.0
Zinc, Total	µg/L	117	EPA 200.8	2.5

[1]The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report.
[2]Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 Standard Units.

Industry-Specific Benchmarks and Sampling Requirements (Condition S5, Table 3)

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level[1]
Petroleum Hydrocarbons	mg/L	10	ECY NWTPH Dx	0.1

[1]The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report.

Issuance Date: December 3, 2014
Effective Date: January 2, 2015
Expiration Date: December 31, 2019

INDUSTRIAL STORMWATER GENERAL PERMIT

A National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities

State of Washington
Department of Ecology
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions which follow.

Heather R. Bartlett
Water Quality Program Manager
Washington State Department of Ecology

TABLE OF CONTENTS

SUMMARY OF PERMIT REPORTS & SUBMITTALS

Permit Section	Submittal	Frequency	Due Date(s)
S1.F	Conditional "No Exposure" Certification Form	As necessary	As necessary, with renewals every 5 years
S2.B	*Application* for Permit Coverage	As necessary	As necessary
S2.B.	Request Modification of Permit Coverage	As necessary	As necessary
S2.D	Request Transfer of Coverage	As necessary	As necessary
S8.D	Level 3 Engineering Report	As necessary	May 15th, prior to Level 3 deadline[1]
S8.D	Level 3 O&M Manual	As necessary	30 days after Level 3 installation
S9.A	Discharge Monitoring Reports (DMRs)	1/quarter	February 15th; May 15th; August 15th; November 15th
S9.B	Annual Report	1/year	May 15th
S9.C.	SWPPP, if requested by *Ecology*	Per *Ecology* request	Within 14 days of request
S9.E	Noncompliance Notification	As necessary	Within 30 days of noncompliance event
G8	Duty to Reapply	1/permit cycle	July 3, 2019

SUMMARY OF REQUIRED ONSITE DOCUMENTATION[2]

Permit Condition(s)	Document Title
S3.A.4.a	*Stormwater Pollution Prevention Plan* (SWPPP)[3]
S9.B	Copies of Annual Reports
S9.C.1.a	Copy of Permit
S9.C.1.b	Copy of Permit Coverage Letter
S9.C.1.c	Original Sampling Records (Field Notes and Laboratory Reports)
S7.C & S9.C.1.d	Site Inspection Reports
S9.C.1.j	Copies of Discharge Monitoring Reports (DMRs)

[1] Unless an alternate due date is specified in an order.
[2] A complete list is contained in Condition S9.C. The Permittee shall make all plans, documents and records required
by this permit immediately available to Ecology or the local jurisdiction upon request.
[3] With signed and completed SWPPP Certification Form(s) – see Appendix 3.

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Facilities Required to Seek Coverage under This General Permit

This statewide permit applies to *facilities* conducting *industrial activities* that *discharge stormwater* to a surface waterbody or to a *storm sewer* system that drains to a surface waterbody. Beginning on the effective date of this permit and lasting through its expiration date, the Permittee is authorized to *discharge stormwater* and conditionally approved non-stormwater *discharges* to *waters of the state*. All *discharges* and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The permit requires coverage for private entities, state, and *local government* facilities, and includes *existing facilities* and *new facilities*. Facilities conducting industrial activities listed in Table 1 or referenced in S1.A.3 shall apply for coverage under this permit or apply for a Conditional No Exposure exemption, if eligible (Condition S1.F). The *Department of Ecology (Ecology)* may also require permit coverage for any *facility* on a case-by-case basis in order to protect *waters of the state* (Condition S1.B).

1. Facilities engaged in any industrial activities in Table 1 shall apply for coverage if *stormwater* from the *facility discharges* to a surface waterbody, or to a *storm sewer* system that *discharges* to a surface waterbody. The *Standard Industrial Classification (SIC)* groups generally, but not always, associated with these activities are listed in Table 1.

Table 1: Activities Requiring Permit Coverage and the Associated SIC Groups

Industrial Activities	SIC Groups
Metal Mining	10xx
Coal Mining	12xx
Oil and Gas Extraction	13xx
Mining and Quarrying of Nonmetallic Minerals, except Fuels (except facilities in SIC Codes 1411, 1422, 1423, 1429, 1442, 1446, 1445, 1459, and 1499; these facilities are covered under the Sand and Gravel General Permit)	14xx
Food and Kindred Products	20xx
Tobacco Products	21xx
Textile Mill Products	22xx
Apparel and Other Finished Products Made from Fabrics and Similar Material	23xx
Lumber and Wood Products	24xx
Furniture and Fixtures	25xx
Paper and Allied Products	26xx
Printing, Publishing and Allied Industries	27xx
Chemicals and Allied Products (including Compost Facilities)	28xx
Petroleum Refining and Related Industries (Except facilities in SIC 2951; these facilities are covered under the Sand and Gravel General Permit)	29xx
Rubber and Miscellaneous Products	30xx
Leather and Leather Products	31xx

2. Any *facility* that has an existing *National Pollutant Discharge Elimination System (NPDES)* permit which does not address all *stormwater discharges associated with industrial activity* [*40 CFR* Subpart 122.26(b)(14)] shall obtain permit coverage.
3. Any *inactive facility* which is listed under *40 CFR* Subpart 122.26(b)(14) where *significant materials* remain onsite and are exposed to *stormwater* shall obtain permit coverage.

B. Significant Contributors of Pollutants

Ecology may require a *facility* to obtain coverage under this permit if *Ecology* determines the *facility*:

1. Is a *significant contributor of pollutants* to *waters of the state*, including *ground water*;
2. May reasonably be expected to cause a violation of any *water quality standard*; or
3. Conducts *industrial activity*, or has a SIC code, with *stormwater* characteristics similar to any *industrial activity* or SIC code listed in Table 1 in S1.A.1.

C. Facilities Not Required to Obtain Coverage

Ecology does not require the types of facilities listed below to obtain coverage under this permit, unless determined to be a *significant contributor of pollutants*.

1. Industrial facilities that submit an *application* and qualify for a Conditional "No Exposure" Exemption. (Condition S1.F)
2. Industrial facilities that *discharge stormwater* only to a municipal *combined sewer* or *sanitary sewer. Discharge* of stormwater to sanitary or *combined sewers* shall only occur as authorized by the municipal sewage authority.
3. Industrial facilities that *discharge stormwater* only to groundwater (e.g., on-site infiltration) with no *discharge* to *surface waters of the state* under any condition.
4. Office buildings and/or administrative parking lots from which *stormwater* does not commingle with stormwater from areas associated with *industrial activity*.
5. Any part of a *facility* with a *discharge* that is in compliance with the instructions of an On-Scene-Coordinator pursuant to *40 CFR* part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances), in accordance with *40 CFR* 122.3(d).
6. Any *land application site* used for the beneficial use of industrial or municipal wastewater for agricultural activities or when applied for landscaping purposes at agronomic rates.
7. Any farmland, domestic garden, or land used for sludge management where domestic sewage sludge (biosolids) is beneficially reused (nutrient builder or soil conditioner) and which is not physically located in the confines of domestic sewage treatment works, or areas that are in compliance with Section 405 (Disposal of Sewage Sludge) of the *Clean Water Act (CWA)*.

3. Industrial activities operated by any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government of the United States, or another entity, such as a private contractor, performing industrial activity for any such department, agency, or instrumentality.
4. Facilities located on "Indian Country" as defined in 18 U.S.C. §1151, except portions of the Puyallup Reservation as noted below.

   Indian Country includes:

   a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.

   b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

   c. All off-reservation federal trust lands held for Native American Tribes.

   Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.
5. Any *facility* authorized to *discharge stormwater* associated with *industrial activity* under an existing NPDES individual or other *general permit.*
6. All *construction activities*. Operators of these construction activities shall seek coverage under the Construction Stormwater General Permit or an individual NPDES permit for *stormwater* associated with *construction activity*.
7. Facilities that *discharge* to a waterbody with a *control plan*, unless this *general permit* adequately provides the level of protection required by the *control plan.*
8. *New dischargers* to a waterbody listed pursuant to Section 303(d) of the CWA, unless the Permittee meets the requirements of Condition S6.B.
9. Hazardous waste *landfills* subject to *40 CFR* Part 445, Subpart A.

E. Discharges to Ground

1. For sites that *discharge* to both surface water and *ground water*, the terms and conditions of this permit shall apply to all *ground water discharges*. However, Permittees are not required to sample on-site discharges to ground (e.g., infiltration), unless specifically required by *Ecology* (Condition G12).
2. Facilities that *discharge* to *ground water* through an *underground injection control well* shall comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

1. Apply for modification of coverage at least 60 days before implementing a *significant process change*; or by May15th prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.
2. Complete the public notice requirements in WAC 173-226-130(5) as part of a complete *application* for modification of coverage.
3. Comply with SEPA as part of a complete *application* for modification of coverage if undergoing a *significant process change*.

C. Permit Coverage Timeline

1. If the applicant does not receive notification from *Ecology*, permit coverage automatically commences on whichever of the following dates occurs last:
   a. The 31st day following receipt by *Ecology* of a completed *application* for coverage.
   b. The 31st day following the end of a 30-day public comment period.
   c. The effective date of the *general permit*.
2. *Ecology* may need additional time to review the *application*:
   a. If the *application* is incomplete.
   b. If it requires additional site-specific information.
   c. If the public requests a public hearing.
   d. If members of the public file comments.
   e. When more information is necessary to determine whether coverage under the *general permit* is appropriate.
3. When *Ecology* needs additional time:
   a. *Ecology* will notify the applicant in writing within 30 days and identify the issues that the applicant must resolve before a decision can be reached.
   b. *Ecology* will submit the final decision to the applicant in writing. If *Ecology* approves the *application* for coverage, coverage begins the 31st day following approval, or the date the approval letter is issued, whichever is later.

d. Documentation in the SWPPP that the BMPs selected are *demonstrably equivalent* to practices contained in stormwater technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.

4. Update of the SWPPP

a. The Permittee shall modify the SWPPP if the owner/operator or the applicable local or state regulatory authority determines during inspections or investigations that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing *pollutant*s in *stormwater* discharges from the site. The Permittee shall modify the SWPPP:

i. As necessary to include additional or modified BMPs designed to correct problems identified.

ii. To correct the deficiencies identified in writing from *Ecology* within 30 days of notice.

b. The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the *facility* that significantly changes the nature of *pollutant*s discharged in *stormwater* from the *facility*, or significantly increases the quantity of pollutants discharged.

c. If a Permittee covered under the 2010 ISGP needs to update their SWPPP to be consistent with the 2015 ISGP, the update shall be completed by January 30, 2015.

5. Other *Pollution Control Plans*

The Permittee may incorporate by reference applicable portions of plans prepared for other purposes at their *facility*. Plans or portions of plans incorporated by reference into a SWPPP become enforceable requirements of this permit and must be available along with the SWPPP as required in S9.F. A *Pollution* Prevention Plan prepared under the Hazardous Waste Reduction Act, Chapter 70.95C RCW, is an example of such a plan.

6. Signatory Requirements

The Permittee shall sign and certify all SWPPPs in accordance with General Condition G2, each time it revises or modifies a SWPPP to comply with Conditions S3.A.4 (Update of the SWPPP), S7 (Inspections) or S8 (Corrective Actions). The SWPPP Certification Form is contained in Appendix 3 of this permit and on Ecology's industrial stormwater website.

B. Specific SWPPP Requirements

The SWPPP shall contain a site map, a detailed assessment of the *facility*, a detailed description of the BMPs, Spill Prevention and Emergency Cleanup Plan, and a sampling plan. The Permittee shall identify any parts of the SWPPP which the *facility* wants to claim as Confidential Business Information.

iv. On-site dust or particulate generating processes.

v. On-site waste treatment, storage, or disposal.

vi. *Vehicle* and equipment fueling, maintenance, and/or cleaning (includes washing).

vii. Roofs or other surfaces exposed to *air emissions* from a manufacturing building or a process area.

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

c. The inventory of materials shall list:

i. The types of materials handled at the site that potentially may be exposed to precipitation or *runoff* and could result in *stormwater pollution*.

ii. A short narrative for each material describing the potential of the *pollutant* to be present in *stormwater* discharges. The Permittee shall update this narrative when data become available to verify the presence or absence of these pollutants.

iii. A narrative description of any potential sources of *pollutant*s from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to *stormwater*. Include the method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.

3. The SWPPP shall identify specific individuals by name or by title within the organization (*pollution* prevention team) whose responsibilities include: SWPPP development, implementation, maintenance, and modification.

4. *Best Management Practices* (BMPs)

a. General BMP Requirements

The Permittee shall describe each BMP selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*. The SWPPP must explain in detail how and where the selected BMPs will be implemented.

b. The Permittee shall include each of the following mandatory BMPs in the SWPPP and implement the BMPs. The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

i. Operational *Source Control BMPs*

1) The SWPPP shall include the *Operational Source Control BMPs* listed as "applicable" in *Ecology*'s SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.

4) Spill Prevention and Emergency Cleanup Plan (SPECP): The SWPPP shall include a SPECP that includes BMPs to prevent spills that can contaminate *stormwater*. The SPECP shall specify BMPs for *material handling* procedures, storage requirements, cleanup equipment and procedures, and spill logs, as appropriate. The Permittee shall:

   a) Store all chemical liquids, fluids, and petroleum products, 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 contained in the largest tank, whichever is greater.

   b) Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.

   c) Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, mobile fueling units, and used oil storage/transfer stations. At a minimum, spill kits shall include:

      i) Oil absorbents capable of absorbing 15 gallons of fuel.

      ii) A storm drain plug or cover kit.

      iii) A non-water containment boom, a minimum of 10 feet in length with a 12-gallon absorbent capacity.

      iv) A non-metallic shovel.

      v) Two five-gallon buckets with lids.

   d) Not lock shut-off fueling nozzles in the open position. Do not "top-off" tanks being refueled.

   e) Block, plug or cover storm drains that receive *runoff* from areas where fueling, during fueling.

   f) Use drip pans or equivalent containment measures during all petroleum transfer operations.

   g) Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone *vehicle*s and equipment awaiting maintenance to protected areas).

   h) Use drip pans and absorbents under or around leaky *vehicles* and equipment or store indoors where feasible. Drain fluids from equipment and *vehicles* prior to on-site storage or disposal.

   i) Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason

Ecology's SWMM for Western Washington and Chapter 8 of the SWMM for Eastern Washington.

Water from washing *vehicles* or equipment, steam cleaning and/or pressure washing is considered *process wastewater*. The Permittee must not allow this process wastewater to comingle with *stormwater* or enter storm drains; and must collect in a tank for off-site disposal, or *discharge* it to a *sanitary sewer*, with written approval from the local sewage authority.

ii. Structural *Source Control BMPs*

1) The SWPPP shall include the *Structural Source Control BMPs* listed as "applicable" in *Ecology*'s SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.

2) The SWPPP shall include BMPs to minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and *runoff* by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.

Permittees shall:

a) Use grading, berming, or curbing to prevent *runoff* of contaminated flows and divert run-on away from these areas.

b) Perform all cleaning operations indoors, under cover, or in bermed areas that prevent *stormwater runoff* and run-on, also that capture any overspray.

c) Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the *stormwater drainage system*.

iii. *Treatment BMPs*

The Permittee shall:

1) Use *Treatment BMPs* consistent with the applicable documents referenced in Condition S3.A.3.

2) Employ oil/water separators, booms, skimmers, or other methods to eliminate or minimize oil and grease contamination of *stormwater* discharges.

3) Obtain *Ecology* approval before beginning construction/installation of all *treatment BMPs* that include the addition of chemicals to provide treatment.

e. Specify procedures for sample collection and handling.

f. Specify procedures for sending samples to a laboratory.

g. Identify parameters for analysis, holding times and preservatives, laboratory *quantitation levels,* and analytical methods.

h. Specify the procedure for submitting results to *Ecology*.

S4. GENERAL SAMPLING REQUIREMENTS

A. General Requirements

The Permittee shall conduct sampling of *stormwater* in accordance with this permit and the SWPPP.

B. Sampling Requirements

1. Sample Timing and Frequency

   a. The Permittee shall sample the *discharge* from each designated location at least once per quarter:

      1st Quarter = January, February, and March

      2nd Quarter = April, May, and June

      3rd Quarter = July, August, and September

      4th Quarter = October, November, and December

   b. Permittees shall sample the *stormwater discharge* from the *first fall storm event* each year. "First fall storm event" means the first time on or after October 1st of each year that precipitation occurs and results in a *stormwater discharge* from a *facility*.

   c. Permittees shall collect samples within the first 12 hours of *stormwater discharge* events. If it is not possible to collect a sample within the first 12 hours of a *stormwater* discharge event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records (Condition S4.B.3) explaining why they could not collect samples within the first 12 hours; or if it is unknown (e.g., discharge was occurring during start of regular business hours).

   d. The Permittee shall obtain *representative samples,* which may be a single grab sample, a time-proportional sample, or a flow-proportional sample.

   e. Permittees need not sample outside of *regular business hours*, during unsafe conditions, or during quarters where there is no discharge, but shall submit a Discharge Monitoring Report each reporting period (Condition S9.A).

2. Sample Location(s)

   a. The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.

h. Reporting units.

i. Sample result.

j. Quality assurance/quality control data.

5. The Permittee shall maintain the original records onsite and make them available to *Ecology* upon request.

6. The Permittee may suspend sampling for one or more parameters (other than "visible oil sheen") for a period of three years (12 quarters) based on consistent attainment of *benchmark* values when:

   a. Eight consecutive quarterly samples demonstrate a reported value equal to or less than the *benchmark* value; or for pH, within the range of 5.0 – 9.0.

   b. For purposes of tallying "consecutive quarterly samples":

      i. Do not include any quarters in which the Permittee did not collect a sample, but should have (e.g., discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter). If this occurs, the tally of consecutive quarterly samples is reset to zero.

      ii. Do not include any quarters in which the Permittee did not collect a sample because there was no *discharge* during the quarter (or the discharges during the quarter occurred outside normal working hours or during unsafe conditions). These quarters are not included in the calculation of eight consecutive quarters, but do not cause the tally to be reset; i.e., they are skipped over.

   c. Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and "visible oil sheen") and compare the average value to the *benchmark* value. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.

7. A Permittee who has a *significant process change* shall not use previous sampling results to demonstrate consistent attainment.

8. Suspension of sampling based on consistent attainment *does not* apply to *pollutant* parameters subject to numeric effluent limits based on federal Effluent Limitation Guidelines (Condition S5.C) or Section 303(d) of the *Clean Water Act* (Condition S6).

C. Analytical Procedures for Sampling Requirements

The Permittee shall ensure that analytical methods used to meet the sampling requirements in this permit conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in *40 CFR* Part 136, unless specified otherwise in this permit.

Table 2: Benchmarks and Sampling Requirements Applicable to All Facilities

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level [a]	Minimum Sampling Frequency [b]
Turbidity	NTU	25	EPA 180.1 Meter	0.5	1/quarter
pH	Standard Units	Between 5.0 and 9.0	Meter/Paper [c]	±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 Eastern WA: 32	EPA 200.8	2.0	1/quarter
Zinc, Total	µg/L	117	EPA 200.8	2.5	1/quarter

a. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.

b. 1/quarter means at least one sample taken each quarter, year-round.

c. Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 SU.

B. Additional Sampling Requirements for Specific Industrial Groups

1. In addition to the requirements in Table 2, all Permittees identified by an *industrial activity* in Table 3 shall sample *stormwater* discharges as specified in Condition S4 and in Table 3.

2. If a *discharge* exceeds a *benchmark* listed in Table 3, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter and compare the average value to the *benchmark* to determine if it the discharge has exceeded a *benchmark*. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level [a]	Minimum Sampling Frequency [b]
5. Timber Product Industry (24xx), Paper and Allied Products (26xx)					
COD	mg/L	120	SM5220-D	10	1/quarter
TSS	mg/L	100	SM2540-D	5	1/quarter
6. Transportation (40xx – 44xx, except 4221-25), Petroleum Bulk Stations and Terminals (5171)					
Petroleum Hydrocarbons (Diesel Fraction)	mg/L	10	NWTPH-Dx	0.1	1/quarter

[a] The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.

[b] 1/quarter means at least one sample taken each quarter, year-round.

[c] For airports where a single Permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these additional five parameters in those *discharge points* that collect runoff from areas where deicing activities occur (SIC 4512-4581).

C. Landfills and Airports Subject to Effluent Limitation Guidelines

1. Permittees with discharges from the following activities shall comply with the effluent limits and monitor as specified in Condition S4 and Tables 4 and 5.
2. The *discharge* of the *pollutant*s at a level more than that identified and authorized by this permit for these activities shall constitute a violation of the terms and conditions of this permit.
3. Permittees operating non-hazardous waste *landfill*s subject to the provisions of *40 CFR* Part 445 Subpart B shall not exceed the effluent limits[4] listed in Table 4.

[4] As set forth in *40 CFR* Part 445 Subpart B, these numeric effluent limits apply to contaminated *stormwater* discharges from Municipal Solid Waste Landfills that have not been closed in accordance with *40 CFR* 258.60, and to contaminated *stormwater* discharges from those landfills that are subject to the provisions of *40 CFR* Part 257 except for discharges from any of the following facilities: (a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill; (b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in *40 CFR* Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation; (c) landfills operated in conjunction with CWT facilities subject to *40 CFR* Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

4. Permittees operating airlines and airports subject to provisions of 40 CFR Part 449 shall comply with the following:

   a. *Airfield* Pavement *Deicing*. Existing and new primary airports with 1,000 or more annual jet departures (*annual non-propeller aircraft departures)* that discharge wastewater associated with *airfield* pavement *deicing* commingled with stormwater must either use non-urea-containing deicers[5], or meet the effluent limit in Table 5 at every *discharge point*, prior to any dilution or any commingling with any non-*deicing* discharge.

Table 5: Effluent Limit Applicable to Airports Subject to 40 CFR Part 449

Parameter	Units	Maximum Daily [a]	Analytical Method [b]	Laboratory Quantitation Level [c]	Minimum Sampling Frequency [d]
Total Ammonia (as N)	mg/L	14.7	SM4500-NH3-GH.	0.3	1/quarter

a. Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day.

b. Or other equivalent EPA-approved method with the same or lower quantitation level.

c. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.

d. 1/quarter means at least one sample taken each quarter, year-round.

D. Conditionally Authorized Non-Stormwater Discharges

1. The categories and sources of non-*stormwater* discharges identified in Condition S5. D.2, below, are conditionally authorized, provided:

   a. The *discharge* is otherwise consistent with the terms and conditions of this permit, including Condition S5, S6 and S10.

   b. The Permittee conducts the following assessment for each non-*stormwater discharge* (except for S5.D.2.a & f) and documents the assessment in the SWPPP, consistent with Condition S3.B.2. The Permittee shall:

      i. Identify each source.

      ii. Identify the location of the discharge into the *stormwater* collection system.

      iii. Characterize the discharge including estimated flows or flow volume, and likely *pollutant*s which may be present.

      iv. Evaluate and implement available and reasonable *source control BMPs* to reduce or eliminate the discharge.

[5] Affected Permittees must certify in its annual report that it does not use *airfield deicing* products that contain urea, or meet the numeric limit in Table 5 (Condition S9.B.4).

B. Eligibility for Coverage of New Discharges to Impaired Waters

Facilities that meet the definition of "*new discharger*" and *discharge* to a *303(d)-listed waterbody* (Category 5), an impaired waterbody with an *applicable TMDL* (Category 4A), or a pollution control program for sediment cleanup (i.e., a Category 4B sediment-impaired waterbody) are not eligible for coverage under this permit unless the *facility*:

1. Prevents all exposure to *stormwater* of the *pollutant*(s) for which the waterbody is impaired, and retains documentation of procedures taken to prevent exposure onsite with its SWPPP; or
2. Documents that the *pollutant*(s) for which the waterbody is impaired is not present at the *facility*, and retains documentation of this finding with the SWPPP; or
3. Provides *Ecology* with data to support a showing that the *discharge* is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data onsite with its SWPPP. The *facility* must provide data and other technical information to *Ecology* sufficient to demonstrate:
    a. For discharges to waters without an *EPA* approved or established *TMDL*, that the *discharge* of the *pollutant* for which the water is impaired will meet instream water quality criteria at the point of discharge to the waterbody; or
    b. For discharges to waters with an *EPA* approved or established *TMDL*, that there are sufficient remaining *wasteload allocations* in an *EPA* approved or established *TMDL* to allow industrial *stormwater discharge* and that existing *dischargers* to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with *water quality standards*.

Facilities are eligible for coverage under this permit if *Ecology* issues permit coverage based upon an affirmative determination that the *discharge* will not cause or contribute to the existing impairment.

C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waters and Puget Sound Sediment Cleanup Sites

1. Permittees discharging to a *303(d)-listed waterbody* (Category 5), either directly or indirectly through a *stormwater drainage system,* shall comply with the applicable sampling requirements and numeric effluent limits in Table 6. If a *discharge point* is subject to an impaired waterbody effluent limit (Condition S6.C) for a parameter that also has a benchmark, the effluent limit supersedes the benchmark.
    a. Facilities subject to these limits include, but may not be limited to, facilities listed in Appendix 4.
    b. For purposes of this condition, "applicable sampling requirements and effluent limits" means the sampling and effluent limits in Table 6 that correspond to the specific parameter(s) the receiving water is *303(d)-listed* for at the time of permit coverage, or Total Suspended Solids (TSS) if the waterbody is 303(d)-listed (Category 5) for *sediment* quality at the time of permit coverage.

5) Conduct additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.

j. The effluent limit for a Permittee who discharges to a freshwater body 303(d)-listed for pH is: Between 6.0 and 8.5, if the 303(d)-listing is for high pH only; Between 6.5 and 9.0, if the 303(d)-listing is for low pH only; and Between 6.5 and 8.5 if the 303(d)-listing is for both low and high pH. All pH effluent limits are applied end-of-pipe.

2. Permittees discharging to a *Puget Sound Sediment Cleanup Site*[6] , either directly or indirectly through a *stormwater drainage system,* shall comply with this section:

   a. Permittees shall sample the discharge for Total Suspended Solids (TSS) in accordance with Table 7.

   b. If the waterbody is listed within Category 5 (sediment medium) where the *outfall* discharges to the waterbody, the discharge is subject to the TSS numeric effluent limit in S6.C.1.c and Table 6.

   c. If the waterbody is not listed within Category 5 (sediment medium) where the *outfall* discharges to the waterbody, the discharge is subject to the TSS *benchmark* in Table 7. If the discharge is subject to more than one TSS benchmark value, the lower benchmark supersedes the higher one. Beginning January 1, 2017, if a *discharge* exceeds the TSS benchmark, the Permittee shall comply with Condition S8.

Table 7: Benchmarks and Sampling Requirements Applicable to Discharges to Puget Sound Sediment Cleanup Sites that are not Category 5 for Sediment Quality

Parameter	Units	Benchmark Value [a]	Analytical Method	Laboratory Quantitation Level [b]	Minimum Sampling Frequency [c]
TSS	mg/L	30	SM2540-D	5	1/quarter

a. Permittees sampling more than once per quarter shall average the sample results and compare the average value to the benchmark to determine if it the discharge has exceeded the benchmark value. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the daily average of the individual grab sample results collected during that 24-hour period; then use the daily average to calculate a quarterly average.

b. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.

c. 1/quarter means at least one sample taken each quarter, year-round.

[6]**Puget Sound Sediment Cleanup Site** means: Category 4B (Sediment) portions of Budd Inlet (Inner), Commencement Bay (Inner), Commencement Bay (Outer), Dalco Passage and East Passage, Duwamish Waterway (including East and West Waterway), Eagle Harbor, Elliot Bay, Hood Canal (North), Liberty Bay, Rosario Strait, Sinclair Inlet, and Thea Foss Waterway; Category 5 (Sediment) portions of the Duwamish Waterway (including East and West Waterway), and Port Gardner and Inner Everett Harbor; and the Port Angeles Harbor sediment cleanup area, as mapped on Ecology's ISGP website. All references to Category 4B and 5 pertain to the 2012 EPA-approved Water Quality Assessment.

Table 8: Sampling and Analytical Procedures for Storm Drain Solids

Analyte	Method in Sediment	Quantitation Level[a]
Conventional Parameters		
Percent total solids	SM 2540G, or ASTM Method D 2216	NA
Total organic carbon	Puget Sound Estuary Protocols (PSEP 1997), or EPA 9060	0.1%
Grain size	Ecology Method Sieve and Pipette (ASTM 1997), ASTMD422, or PSEP 1986/2003	NA
Metals		
Antimony, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw[b]
Arsenic, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.1 mg/kg dw
Beryllium, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Cadmium, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Chromium, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.5 mg/kg dw
Copper, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Lead, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Mercury, Total	EPA Method 1631E, or EPA Method 7471B	0.005 mg/kg dw
Nickel, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.1 mg/kg dw
Selenium, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.5 mg/kg dw
Silver, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.1 mg/kg dw
Thallium, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	0.2 mg/kg dw
Zinc, Total	EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020	5.0 mg/kg dw
Organics		
PAH compounds[c]	EPA Method 8270 D	70 µg/kg dw
PCBs (aroclors), Total[d]	EPA Method 8082	10 µg/kg dw
Petroleum Hydrocarbons		
NWTPH-Dx	NWTPH-Dx	25.0-100.0 mg/kg dw

a. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on

S7. INSPECTIONS

A. Inspection Frequency and Personnel

1. The Permittee shall conduct and document visual inspections of the site each month.
2. The Permittee shall ensure that inspections are conducted by *qualified personnel*.

B. Inspection Components

Each inspection shall include:

1. Observations made at *stormwater* sampling locations and areas where *stormwater* associated with *industrial activity* is discharged off-site; or discharged to *waters of the state,* or to a *storm sewer* system that drains to *waters of the state*.
2. Observations for the presence of floating materials, visible oil sheen, discoloration, *turbidity*, odor, etc. in the *stormwater* discharge(s).
3. Observations for the presence of *illicit discharges* such as *domestic wastewater*, *noncontact cooling water*, or *process wastewater* (including *leachate*).
   a. If an *illicit discharge* is discovered, the Permittee shall notify *Ecology* within seven days.
   b. The Permittee shall eliminate the *illicit discharge* within 30 days.
4. A verification that the descriptions of potential *pollutant* sources required under this permit are accurate.
5. A verification that the site map in the SWPPP reflects current conditions.
6. An assessment of all BMPs that have been implemented, noting all of the following:
   a. Effectiveness of BMPs inspected.
   b. Locations of BMPs that need maintenance.
   c. Reason maintenance is needed and a schedule for maintenance.
   d. Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.

C. Inspection Results

1. The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site, as part of the SWPPP, for *Ecology* review. The Permittee shall ensure each inspection report documents the observations, verifications and assessments required in S7.B and includes:
   a. Time and date of the inspection.
   b. Locations inspected.
   c. Statements that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Condition G2., the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this permit.

3. **Level One Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than the DMR due date for the quarter the *benchmark* was exceeded.

C. Level Two Corrective Actions – Structural Source Control BMPs

Permittees that exceed an applicable *benchmark* value in Table 2, Table 3 and/or Table 7 (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the Permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Structural Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges.
3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).
4. **Level 2 Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year.
   a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time by approving a *Modification of Permit Coverage.*
   b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage.*
   c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
   d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
   e. For the year following the calendar year the Permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

D. Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable *benchmark* value in Table 2, Table 3 and/or Table 7 (for a single parameter) for any three quarters during a calendar year shall complete a

4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.
5. **Level 3 Deadline**: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than September 30th the following year.
   a. If installation of necessary *Treatment BMPs* is not feasible by the Level 3 Deadline; *Ecology* may approve additional time by approving a *Modification of Permit Coverage.*
   b. If installation of *Treatment BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, *Ecology* may waive the requirement for *Treatment BMPs* by approving a *Modification of Permit Coverage.*
   c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to *Ecology* in accordance with Condition S2.B, by May 15th prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
   d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
   e. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

S9. REPORTING AND RECORDKEEPING

A. Discharge Monitoring Reports

1. The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) or a Solids Monitoring Form (SMR)[8] form provided, or otherwise approved, by *Ecology*.
2. Upon permit coverage, the Permittee shall ensure that DMRs are submitted to *Ecology* by the DMR Due Dates below:

Table 9: Reporting Dates and DMR Due Dates

Reporting Period	Months	DMR Due Date
1st	January-March	May 15
2nd	April-June	August 15
3rd	July-Sept	November 15
4th	October-December	February 15

[8] SMR required if Condition S6.C.2 applies.

d. Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

e. Primary airport Permittees with at least 1,000 annual jet departures shall include a certification statement in each annual report that it does not use *airfield deicing* products that contain urea. Alternatively, Permittees shall meet the numeric effluent limit for ammonia in Condition S5.C. Table 5.

4. Permittees shall retain a copy of all annual reports onsite for *Ecology* review.

C. Records Retention

1. The Permittee shall retain the following documents onsite for a minimum of five years:
   a. A copy of this permit.
   b. A copy of the permit coverage letter.
   c. Records of all sampling information specified in Condition S4.B.3.
   d. Inspection reports including documentation specified in Condition S7.
   e. Any other documentation of compliance with permit requirements.
   f. All equipment calibration records.
   g. All BMP maintenance records.
   h. All original recordings for continuous sampling instrumentation.
   i. Copies of all laboratory reports as described in Condition S3.B.4.
   j. Copies of all reports required by this permit.
   k. Records of all data used to complete the *application* for this permit.
2. The Permittee shall extend the period of records retention during the course of any unresolved litigation regarding the *discharge* of *pollutant*s by the Permittee, or when requested by *Ecology*.
3. 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*.

D. Additional Sampling by the Permittee

If the Permittee samples any *pollutant* at a designated sampling point more frequently than required by this permit, then the Permittee shall include the results in the calculation and reporting of the data submitted in the Permittee's DMR.

If Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.

F. Public Access to SWPPP

The Permittee shall provide access to, or a copy of, the SWPPP to the public when requested in writing. Upon receiving a written request from the public for the SWPPP, the Permittee shall:

1. Provide a copy of the SWPPP to the requestor within 14 days of receipt of the written request; or
2. Notify the requestor within ten days of receipt of the written request of the location and times within normal business hours when the requestor may view the SWPPP , and provide access to the SWPPP within 14 days of receipt of the written request; or
3. Provide a copy of the plans and records to *Ecology*, where the requestor may view the records, within 14 days of a request; or may arrange with the requestor for an alternative, mutually agreed upon location for viewing and/or copying of the plans and records. If access to the plans and records is provided at a location other than at an *Ecology* office, the Permittee will provide reasonable access to copying services for which it may charge a reasonable fee.

S10. COMPLIANCE WITH STANDARDS

A. Discharges shall not cause or contribute to a violation of *Surface Water Quality Standards* (Chapter 173-201A WAC), Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (*40 CFR* 131.36). Discharges that are not in compliance with these standards are prohibited.

B. *Ecology* will presume compliance with *water quality standards*, unless *discharge* monitoring data or other site specific information demonstrates that a discharge causes or contributes to violation of *water quality standards*, when the Permittee is:

1. In full compliance with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.
2. Fully implementing storm water *best management practices* contained in storm water technical manuals approved by the department, or practices that are *demonstrably equivalent* to practices contained in storm water technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.

C. Prior to the *discharge* of *stormwater* and non-stormwater to *waters of the state*, the Permittee shall apply all known and reasonable methods of prevention, control, and treatment (*AKART*). To comply with this condition, the Permittee shall prepare and implement an adequate SWPPP, with all applicable and appropriate BMPs, including the BMPs necessary to meet the standards identified in Condition S10.A, and shall install and maintain the BMPs in accordance with the SWPPP, applicable SWMMs, and the terms and conditions of this permit.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this *general permit* shall be consistent with the terms and conditions of this *general permit*. Any *discharge* of any *pollutant* more frequently than, or at a level in excess of that identified and authorized by the *general permit*, shall constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

A. All permit *applications* shall be signed:

1. In the case of corporations, by a *responsible corporate officer*.
2. In the case of a partnership, by a general partner of a partnership.
3. In the case of sole proprietorship, by the proprietor.
4. In the case of a municipal, state, or other public *facility*, by either a principal executive officer or ranking elected official.

B. All reports required by this permit and other information requested by *Ecology* shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the *Ecology*.
2. The authorization specifies 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.

C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the *facility*, a new authorization satisfying the requirements of paragraph G2.B.2 above shall be submitted to *Ecology* prior to, or together with, any reports, information, or *applications* to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

"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."

5. A determination that the permitted activity endangers human health or the environment, or contributes to *water quality standards* violations.
6. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.
7. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

B. *Ecology* may require any *discharger* under this permit to apply for and obtain coverage under an individual permit or another more specific *general permit*.

C. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within 90 days from the time of revocation and is submitted along with a complete individual permit *application* form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new *application*, or a supplement to the previous *application*, whenever a material change to the *industrial activity* or in the quantity or type of *discharge* is anticipated which is not specifically authorized by this permit. This *application* shall be submitted at least 60 days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the expiration date of this permit.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other *pollutant*s removed in the course of treatment or control of *stormwater* shall not be resuspended or reintroduced to the final effluent stream for *discharge* to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to *Ecology*, within a reasonable time, all information which *Ecology* may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the *Clean Water Act* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal *application*.

G17. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the *Clean Water Act* for toxic *pollutant*s within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18. PENALTIES FOR TAMPERING

The *Clean Water Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate any sampling device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or imprisonment of not more than four years, or both.

G19. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to *Ecology* of planned physical alterations, modifications or additions to the permitted *industrial activity*, which will result in:

A. The permitted *facility* being determined to be a new source pursuant to *40 CFR* 122.29(b).

B. A *significant process change*, as defined in the glossary of this permit.

C. A change in the location of *industrial activity* that affects the Permittee's sampling requirements in Conditions S3, S4, S5, and S6.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to *40 CFR* 122.62(a) to specify and limit any *pollutant*s not previously limited. Until such modification is effective, any new or increased *discharge* in excess of permit limits or not specifically authorized by this permit constitutes a violation.

C. The appeal of *general permit* coverage of an individual *discharger* does not affect any other *discharger*s covered under this *general permit*. If the terms and conditions of this *general permit* are found to be inapplicable to any individual *discharger*(s), the matter shall be remanded to *Ecology* for consideration of issuance of an individual permit or permits.

G24. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or *application* of any provision of this permit to any circumstance, is held invalid, the *application* of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25. BYPASS PROHIBITED

Bypass, which is the intentional diversion of waste streams from any portion of a treatment *facility*, is prohibited, and *Ecology* may take enforcement action against a Permittee for *bypass* unless one of the following circumstances (A, B, or C) is applicable.

A. *Bypass* for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by *Ecology* prior to the *bypass*. The Permittee must submit prior notice, if possible, at least ten days before the date of the *bypass*.

B. *Bypass* Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit

This *bypass* is permitted only if:

1. *Bypass* is unavoidable to prevent loss of life, personal injury, or *severe property damage*. "*Severe property damage*" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*.
2. There are no feasible alternatives to the *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a *bypass* which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment *facility*.
3. *Ecology* is properly notified of the *bypass* as required in condition S9E of this permit.

APPENDIX 1 - ACRONYMS

AKART	All Known, Available and Reasonable methods of prevention, control and Treatment
BMP	Best Management Practice
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation & Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWT	Centralized Waste Treatment
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FAA	Federal Aviation Administration
FWPCA	Federal Water Pollution Control Act
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
SARA	Superfund Amendment and Reauthorization Act
SEPA	State Environmental Policy Act
SIC	Standard Industrial Classification
SMCRA	Surface Mining Control and Reclamation Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality

Bypass means the intentional diversion of waste streams from any portion of a treatment *facility*.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a *sanitary sewer* and a *storm sewer*, and into which inflow is allowed by local ordinance.

Construction Activity means clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, industrial buildings, and demolition activity.

Control Plan means a *total maximum daily load (TMDL)* determination, restrictions for the protection of state or federal threatened or endangered species, a *ground water* management plan, or other limitations that regulate or set limits on discharges to a specific waterbody or *ground water* recharge area.

Daily Average means the average measurement of the pollutant throughout a period of 24 consecutive hours starting at 12:01 A.M. and ending at the following 12:00 P.M. (midnight).

Deicing means procedures and practices to remove or prevent any accumulation of snow or ice on: 1) an aircraft; or 2) *airfield* pavement.

Demonstrably Equivalent means that the technical basis for the selection of all storm water *best management practices* are documented within a storm water *pollution* prevention plan. The storm water *pollution* prevention plan must document: 1) The method and reasons for choosing the storm water *best management practices* selected; 2) The *pollutant* removal performance expected from the practices selected; 3) The technical basis supporting the performance claims for the practices selected, including any available existing data concerning field performance of the practices selected; 4) An assessment of how the selected practices will comply with state *water quality standards*; and 5) An assessment of how the selected practices will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment.

Detention means the temporary storage of *stormwater* to improve quality and/or to reduce the mass flow rate of discharge.

Discharge [of a pollutant] means any addition of any *pollutant* or combination of pollutants to waters of the United States from any point source. This definition includes additions of pollutants into waters of the United States from: surface *runoff* which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, *municipality*, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Illicit Discharge means any *discharge* that is not composed entirely of *stormwater* except (1) discharges authorized pursuant to a separate NPDES permit, or (2) conditionally authorized non-*stormwater* discharges identified in Condition S5.D.

Inactive Facility means a *facility* that no longer engages in business, production, providing services, or any auxiliary operation.

Industrial Activity means (1) the 10 categories of industrial activities identified in *40 CFR* 122.26(b)(14)(i-ix and xi), (2) any *facility* conducting any activities described in Table 1, or (3) any facility identified by *Ecology* as a *significant contributor of pollutants*.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a *land application site*, surface impoundment, injection well, or waste pile.

Land Application Site means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Leachate means water or other liquid that has percolated through raw material, product or waste and contains substances in solution or suspension as a result of the contact with these materials.

Local Government means any county, city, or town having its own government for local affairs.

Material Handling means storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product, or waste product.

Municipality means a political unit such as a city, town, or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal *Clean Water Act*, for the *discharge* of *pollutants* to *surface waters of the state* from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of *Ecology*.

New Development means land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

New Discharge(r) means a *facility* from which there is a discharge, that did not commence the *discharge* at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See *40 CFR* 122.2.

Qualified Industrial Stormwater Professional means a licensed professional engineer, geologist, hydrogeologist; Certified Professional in Stormwater Quality, Certified Professional in Erosion and Sediment Control; or qualified environmental consultant with education and experience in stormwater management and licensed to do business in the State of Washington.

Qualified Personnel means those who possess 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.

Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) means the lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

Reasonable Potential means the likely probability for *pollutant*s in the *discharge* to exceed the applicable water quality criteria in the receiving waterbody.

Redevelopment means on a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

Regular Business Hours means those time frames when the *facility* is engaged in its primary production process, but does not include additional shifts or weekends when partial staffing is at the site primarily for maintenance and incidental production activities. *Regular business hours* do not include periods of time that the *facility* is inactive and *unstaffed*.

Representative [sample] means a sample of the *discharge* that accurately characterizes *stormwater runoff* generated in the designated drainage area of the *facility*.

Responsible Corporate Officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

case there are unforeseen events or unknown sources of the *pollutant*. The calculation also accounts for seasonable variation in water quality.

Treatment BMPs means BMPs that are intended to remove *pollutants* from *stormwater*.

Turbidity means the clarity of water expressed as nephelometric *turbidity* units (NTU) and measured with a calibrated turbidimeter.

Underground Injection Control Well means a well that is used to *discharge* fluids into the subsurface. An *underground injection control well* is one of the following:

1. A bored, drilled, or driven shaft,
2. An improved sinkhole, or
3. A subsurface fluid distribution system. (WAC 173-218-030)

Unstaffed means the *facility* has no assigned staff. A site may be "*unstaffed*" even when security personnel are present, provided that *pollutant* generating activities are not included in their duties.

Vehicle means a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Vehicle Maintenance means the rehabilitation, mechanical repairing, painting, fueling, and/or lubricating of a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Wasteload Allocation (WLA) means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of *pollution*. WLAs constitute a type of water quality based effluent limitation (*40 CFR* 130.2(h)).

Water Quality Standards means the Water Quality Standards for *Surface Waters of the State* of Washington, Chapter 173-201A WAC, Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (*40 CFR* 131.36).

Waters of the State includes those waters defined as "waters of the United States" in *40 CFR* Subpart 122.2 within the geographic boundaries of Washington State. State statute defines "*waters of the state*" to include lakes, rivers, ponds, streams, wetlands, inland waters, under*ground waters*, salt waters and all other surface waters and water courses within the jurisdiction of the state of Washington (Chapter 90.48 RCW).

APPENDIX 3 - SWPPP CERTIFICATION FORM

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 backside, 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."

Operator's Printed Name * _____ Title _____

Operator's Signature * _____ Date _____

* Federal regulations require this document to be signed in accordance with Condition G2.

What do I need to use the WQWebDMR system?

The WQWebDMR system requires a few common computer components:

- PC or Mac.
- DSL or Broadband Internet connection.
- Web browser (Internet Explorer 7.0 or higher, Chrome, FireFox, etc.).
- Personal e-mail account.
- Printer.

So how do I get started?

Step by step registration instructions, with screen shots, are provided at: www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html

Click on the "How to register for WQWebDMR" link to download the registration instructions.

The steps are summarized here:

1. Sign up for a Secure Access Washington (SAW) account or use an existing SAW account.
2. In SAW, register for a new service: Water Quality Permitting Portal (WQWebDMR).
3. Define a "role" under your permit.
4. Create an electronic signature account (if required).
5. Fill out the electronic signature agreement form (ESAF), print it, and mail to Ecology (if required).
6. Look for your approval e-mail and follow the instructions contained in it.

Need help?

Please feel free to contact Ecology if you have any questions about WQWebDMR.

For technical assistance and help getting registered, contact the WQWebDMR help staff at:

E-mail: WQWebPortal@ecy.wa.gov
Phone: 1-800-633-6193/Option 3
or 360-407-7097 (Olympia Area)

For permit-specific or urgent issues, please contact the one of the Ecology offices below:

Central Regional Office - Yakima
WQWebDMR-CRO@ecy.wa.gov

Eastern Regional Office - Spokane
WQWebDMR-ERO@ecy.wa.gov

Northwest Regional Office - Bellevue
WQWebDMR-NWRO@ecy.wa.gov

Southwest Regional Office - Lacey
WQWebDMR-SWRO@ecy.wa.gov

Major Industrial Unit (Ecology HQ)
WQWebDMR-Industrial@ecy.wa.gov

Stormwater Unit (Ecology HQ)
WQWebDMR-Stormwater@ecy.wa.gov

If you need this document in a version for the visually impaired, call the Water Quality Program at 360-407-6600.. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

Water Quality Permitting Portal (WQWebDMR)

Washington State Department of Ecology

DEPARTMENT OF ECOLOGY
State of Washington

Publication No. 11-10-013
Rev. 09/2013

Permit Section(s)	2010 ISGP	2015 ISGP
	report, plans and specifications, and an O&M Manual to Ecology for review in accordance with Chapter 173-240 WAC. (See 2010 Condition S8.D)	O&M Manual to Ecology for review. The engineering report must address 7 elements set forth in S8.D.3.a. O&M Manual submitted to Ecology no later than 30 days after installation. (See 2015 ISGP Condition S8.D) [Clarifying Language Added:] *While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.*
S9. Reporting and Recordkeeping		
S9.A Discharge Monitoring Reports	[Summary:] DMRs and other written reports must be submitted electronically or by mail.	[Summary:] DMRs and other written reports must be submitted electronically (Water Quality Permitting Portal), unless waiver granted. Clarified first DMR due date when facility obtains permit coverage mid-permit cycle.
S9.B. Annual Reports	N/A	Clarified that Annual Reports are not required if the permittee didn't have permit coverage during the previous calendar year.
S9.B. Annual Reports	N/A	[Clarifying Language Added:] *Primary airport permittees with at least 1,000 annual jet departures shall include a certification statement in each annual report that it does not use airfield deicing products that contain urea. Alternatively, permittees shall meet the numeric effluent limit for ammonia in Condition S5.C. Table 5.*
S9.E. Reporting Permit Violations	[Summary:] Written reports of non-compliance must be submitted within 30 days.	[Summary:] Written reports of non-compliance must be submitted within 5 days; may be waived on a case by case basis, if phone notification occurs within 24 hours. All written reports must be submitted electronically, unless waiver granted.

Permit Section(s)	2010 ISGP	2015 ISGP
		Refer to Condition S5.C. Table 5
S6. Discharges to Impaired Waterbodies		
S6.C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waterbodies and Puget Sound Sediment Cleanup Sites	N/A	[Clarifying Language Added:] *If an outfall is subject to an impaired waterbody effluent limit (Condition S6.C) for a parameter that also has a benchmark (Condition S5), the effluent limit supersedes the benchmark.*
S6.C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waterbodies and Puget Sound Sediment Cleanup Sites	Summary of 2010 ISGP: If receiving water is Category 5 for Sediment: • Sample TSS quarterly • 30 mg/L TSS limit, effective 1/1/10; unless compliance schedule granted.	Summary of Change: If receiving water is Category 5 for Sediment: • Sample TSS quarterly • 30 mg/L TSS limit, effective 1/1/17; but if discharge was subject to TSS limit under 2010 ISGP, TSS limit effective 1/1/15. If Non-Category 5 Puget Sound Sediment Cleanup Site (Defined in Appendix 2): • Sample TSS quarterly • 30 mg/L TSS benchmark, effective 1/1/17 • If discharge is subject to different TSS benchmarks, the lower benchmark controls. Discharges to ISGP-defined Puget Sound Sediment Cleanup Sites are subject to additional storm drain line cleaning BMPs, solids sampling, and reporting. (See S6.C)
S6.D. Requirements for Discharges to Waters with Applicable TMDLs	N/A	[Clarifying Language Added:] *If an outfall is subject to a TMDL-related effluent limit (Condition S6.D) for a parameter that also has a benchmark (Condition S5), the effluent limit supersedes the benchmark.*
S8.Corrective Actions		
S8. B.1. Level One Corrective Actions – Operational Source Control BMPs	1. *Within 14 days of receipt of sampling results that indicate a benchmark exceedance:*	[Language added to clarify how the 14-day response time works with quarterly averages (S5.A.3, S5.B.2 and/or S6.C.2.c)] 1. *Within 14 days of receipt of*

Permit Section(s)	2010 ISGP	2015 ISGP
		drainage/treatment facilities in accordance with the Maintenance Standards set forth in the applicable Stormwater Management Manual (SWMM), other guidance documents or manuals approved in accordance with S3.A.3.c., demonstrably equivalent BMPs per S3.A.3.d., or an O&M Manual submitted to Ecology in accordance with S8.D.
S3.B Specific SWPPP requirements; Inspections and Recordkeeping	N/A	At a minimum the SWPPP shall: *f) Include all inspection reports completed by the Permittee (S7.C).*
S4. Sampling and S5. Benchmarks and Effluent Limitations		
S4.B.2 Sample Location(s)	d. The exception to sampling each point of discharge in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).	~~d. The exception to sampling each point of discharge in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).~~ New Language: d. The Permittee shall notify Ecology of any changes or updates to sample locations, discharge points, and/or outfalls by submitting an "Industrial Stormwater General Permit Discharge/Sample Point Update Form" to Ecology. Refer to Appendix 2 for definition of *Substantially Identical Discharge Point.*
S4.B.3.h Sample Documentation	Summary: Not required to record weather conditions at time of sampling.	Summary: Permittees must record weather conditions at time of sampling. Existing Permit Language: *For each stormwater sample taken, the Permittee shall record the following information and retain it on-site for Ecology review:* New Language: h. Weather conditions.
S4.B.6 Consistent Attainment	Summary: Consistent attainment limited to samples collected	Summary of change: Consistent attainment may be based upon samples collected prior to effective date of

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

December 3, 2024

Chris Bui
Kenworth Truck Company - Renton
PO Box 9001
Renton, WA 98057-9001

WAR000858
KENWORTH TRUCK CO RENTON
1601 N 8TH ST
RENTON, WA 98057

RE: Coverage under the Industrial Stormwater General Permit: WAR000858

Dear Chris Bui:

On December 2, 2024, the Washington State Department of Ecology (Ecology) reissued the Industrial Stormwater National Pollutant Discharge Elimination System and State Waste Discharge General Permit (ISGP). The permit becomes effective on January 1, 2025, and expires December 31, 2029. This is your permit coverage letter for Permit Number WAR000858, effective January 1, 2025. Retain this letter with a copy of the permit and Stormwater Pollution Prevention Plan (SWPPP). It is the official record of permit coverage for your site. For easy access from your site, you may keep your records in an accessible electronic format.

Permit Overview
The new ISGP has a number of changes. The changes are summarized in the fact sheet and Appendix C Addendum to Fact Sheet. You can find copies of the new Industrial Stormwater General Permit, permit forms, and other information at ecology.wa.gov/IndustrialStormwaterPermit.

Discharge Monitoring Reports and Site-Specific Monitoring Requirements
The ISGP requires you to submit quarterly discharge monitoring reports (DMRs) electronically using Ecology's secure online system, WQWebDMR. Find step-by-step instructions on how to register for WQWebDMR and the WQWebDMR User Guide at ecology.wa.gov/programs/wq/permits/paris/webdmr.html If you have questions about using WQWebDMR, contact the Water Quality Information Technology Help Desk at 360-407-7097 or email WQWebPortal@ecy.wa.gov.

We are currently updating our Permit and Reporting Information System (PARIS) database with the site-specific monitoring requirements of the new ISGP, based on the renewal application you submitted earlier this year. We will send you an additional site-specific monitoring summary page with more information after we have finished setting up your monitoring requirements and DMRs in the PARIS database. We will send you this monitoring summary page as soon as possible to support your collection of samples and submitting the first DMR of the permit cycle, due on May 15, 2025.

Permit Fees
State law (RCW 90.48.465) requires that all permittees pay an annual permit fee based upon the state fiscal year. The state fiscal year begins each year on July1 and ends on June 30 the following year. Ecology sends permit fee invoices to all permittees annually. Permittees who have permit coverage on or after July 1 will receive a permit fee invoice for coverage during that state fiscal year. If you would like more information on the permit fee process, visit Ecology's Water Quality Permit Fees webpage (ecology.wa.gov/WQFees) or email the Fee Unit at wqfeeunit@ecy.wa.gov.

Your Right to Appeal
You have a right to appeal the final general permit and general permit coverage for a specific facility to the Pollution Control Hearings Board. Appeals of general permit coverage must be filed within 30 days of the receipt of this coverage letter, where "date of receipt" is defined in RCW 43.21B.001(2). Any appeal is limited to the general permit's applicability or non-applicability to a specific discharger.

The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. For more information regarding your right to appeal, view Appeal of a General Permit Coverage, apps.ecology.wa.gov/publications/SummaryPages/1710007.html.

Permit Administration Assistance
If you have questions regarding your application, updating permit information, finding or completing permit forms, permit transfers or termination, or drafting public notices please contact your permit administrator Alyssa Brewer, ALYB461@ecy.wa.gov, (564) 669-4922.

Ecology Regional Inspector Assistance
If you have questions regarding stormwater management issues at your facility, please contact your regional inspector Amy Jankowiak, ajan461@ecy.wa.gov, (425) 429-4259.

Questions or Additional Information

Ecology is here to help. Please review our permit webpage at ecology.wa.gov/IndustrialStormwaterPermit. If you have any questions about the interpretation or implementation of the new ISGP, please contact Shannon McClellan, Shannon.McClellan@ecy.wa.gov, 360-280-8370.

Sincerely,

Jeff Killelea, Manager
Permit and Technical Services Section
Water Quality Program

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 3, 2014

Tom Nelson
Project Manager
Kenworth Truck Company - Renton
PO Box 9001
Renton, WA 98057-9001

Facility Name: KENWORTH TRUCK CO RENTON
Location: 1601 N 8TH ST
Renton, WA 98057
Permit No: WAR000858
County: King

RE: Reissuance of Coverage under the Industrial Stormwater General Permit

Dear Tom Nelson:

The Washington Department of Ecology (Ecology) has reissued the Industrial Stormwater General Permit (permit). A copy of your new permit is enclosed. **Retain this letter with your permit and Stormwater Pollution Prevention Plan. It is the official record of permit coverage for your facility.** Ecology issued the final permit December 3, 2014 and it becomes effective January 2, 2015.

Permit Overview
The new permit has a number of changes. The most significant changes are summarized in the enclosed "Summary of Changes" table. You can find more information on Ecology's website at: http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html. Please contact Ecology if you have any questions.

New Reporting Requirements
Beginning in 2015, you must submit Discharge Monitoring Reports and Annual Reports electronically, using Ecology's Water Quality Permitting Portal– Permit Submittals application, unless a waiver from electronic reporting has been granted. You can find more information regarding Ecology's Water Quality Permitting Portal on our website at: http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html.

If you have technical questions regarding Ecology's Water Quality Permitting Portal, please contact the portal staff at (800) 633-6193/option 3 or email WQWebPortal@ecy.wa.gov.

Site Specific Monitoring Requirements
Enclosed is a summary of the monitoring requirements for your facility. This summary is based on the best information available to Ecology about your facility. If you believe there is a discrepancy between what the permit requires and the enclosed summary, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the summary, the permit requirements take precedence.

Your Right to Appeal the Permit
You have a right to appeal the terms and conditions of this general permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this permit issuance notice. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this notice:

- File your appeal and a copy of this notice with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this notice on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

Address and Location Information

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Road SW, Suite 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

For Additional Information or Assistance
Ecology is committed to providing assistance to you. Please review our web page at http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html. For questions about transfers, terminations, and other administrative issues, please contact Clay Keown at ckeo461@ecy.wa.gov or (360) 407-6048.

If you have questions regarding stormwater management issues at your site, please contact Greg Stegman at GSTE461@ecy.wa.gov or (425) 649-7019.

Questions
If you have questions regarding the permit, please contact Jeff Killelea at jeff.killelea@ecy.wa.gov or (360) 407-6127.

Sincerely,

Bill Moore, P.E., Manager
Program Development Services Section
Water Quality Program

Enclosures

Permit No: WAR000858
Facility Name: KENWORTH TRUCK CO RENTON
Location: 1601 N 8TH ST
Renton, WA 98057
SIC Codes: 3711, 3713

Summary of Your Facility's ISGP Monitoring Requirements

This summary is based on the best information available to Ecology about your facility. If you believe there is a discrepancy between what the permit requires and the enclosed summary, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the summary, the permit requirements take precedence.

Benchmarks and Sampling Requirements Applicable to All Facilities (Condition S5, Table 2)

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level[1]
Turbidity	NTU	25	EPA 180.1 Meter	0.5
pH	SU	Between 5.0 - 9.0	Meter/Paper[2]	±0.5
Oil Sheen	Yes/No	No visible oil sheen	N/A	N/A
Copper, Total	µg/L	Western WA: 14 Eastern WA: 32	EPA 200.8	2.0
Zinc, Total	µg/L	117	EPA 200.8	2.5

[1]The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report.
[2]Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 Standard Units.

Additional Sampling

Ecology may have established site-specific sampling requirements in addition to those contained in the ISGP (Administrative Order, permit modification, etc.). These additional requirements are not addressed in this summary.

Summary of Significant Changes to the 2015 Industrial Stormwater General Permit

Permit Section(s)	2010 ISGP	2015 ISGP
S1. Permit Coverage		
S1.A Facilities required to seek permit coverage	*SIC 4953: Active landfills, including, but not limited to, wood waste and inert landfills, transfer stations, open dumps, compost facilities, and land application sites, except as described in S1.C.6 or C.7.*	*SIC 4953: ~~Active Landfills~~ Refuse Systems, including, but not limited to, ~~wood waste and inert~~ landfills, transfer stations, open dumps, ~~compost facilities,~~ and land application sites, except as described in S1.C.6 or C.7.* Note: Compost Facilities moved from SIC 4953 to SIC 28xx
S1.D Facilities excluded from permit coverage	N/A	Added: *40 CFR 449.11(a) Airports with more than 10,000 annual jet departures.*
S1.D Facilities excluded from permit coverage	*Facilities located on Tribal lands or facilities that discharge stormwater to receiving waters subject to water quality standards of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation.*	Summary: Clarified that ISGP is not applicable on "Indian Country" as defined in 18 U.S.C. §1151, except specific portions of the Puyallup Reservation. Refer to ISGP Condition S1.D.4 for full language. Note: U.S. EPA's Multi-Sector General Permit applies to areas where the ISGP does not.
S3. Stormwater Pollution Prevention Plan		
S3.A.3 Proper Selection and Use of Stormwater Management Manuals	*Stormwater Management Manual for Western Washington (2005 edition), for sites west of the crest of the Cascade Mountains.*	*Stormwater Management Manual for Western Washington (~~2005~~ 2012 edition), for sites west of the crest of the Cascade Mountains.*
S3.A/B SWPPP Updates	Update SWPPP to be consistent with 2010 ISGP by 7/1/10	Update SWPPP to be consistent with 2015 ISGP by 1/30/15
S3.B Specific SWPPP requirements; Operational Source Control; Preventative Maintenance	N/A	New Language: *Maintain ponds, tanks/vaults, catch basins, swales, filters, oil/water separators, drains, and other stormwater*

Note: This document contains summaries of key changes; please refer to the 2015 ISGP for complete information. Language in *italics* is actual permit language. Underlined language is new, and ~~struck~~ language was deleted.

Permit Section(s)	2010 ISGP	2015 ISGP
		drainage/treatment facilities in accordance with the Maintenance Standards set forth in the applicable Stormwater Management Manual (SWMM), other guidance documents or manuals approved in accordance with S3.A.3.c., demonstrably equivalent BMPs per S3.A.3.d., or an O&M Manual submitted to Ecology in accordance with S8.D.
S3.B Specific SWPPP requirements; Inspections and Recordkeeping	N/A	At a minimum the SWPPP shall: *f) Include all inspection reports completed by the Permittee (S7.C).*
S4. Sampling and S5. Benchmarks and Effluent Limitations		
S4.B.2 Sample Location(s)	d. The exception to sampling each point of discharge in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).	~~d. The exception to sampling each point of discharge in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).~~ New Language: d. The Permittee shall notify Ecology of any changes or updates to sample locations, discharge points, and/or outfalls by submitting an "Industrial Stormwater General Permit Discharge/Sample Point Update Form" to Ecology. Refer to Appendix 2 for definition of *Substantially Identical Discharge Point*.
S4.B.3.h Sample Documentation	Summary: Not required to record weather conditions at time of sampling.	Summary: Permittees must record weather conditions at time of sampling. Existing Permit Language: *For each stormwater sample taken, the Permittee shall record the following information and retain it on-site for Ecology review:* New Language: h. Weather conditions.
S4.B.6 Consistent Attainment	Summary: Consistent attainment limited to samples collected	Summary of change: Consistent attainment may be based upon samples collected prior to effective date of

Permit Section(s)	2010 ISGP	2015 ISGP
	after effective date of permit.	2015 ISGP. Once consistent attainment is achieved, may suspend sampling for a period of 3 years, regardless of expiration of 2010 ISGP or effective date of 2015 ISGP. Refer to Condition S4.B.6 for new language.
S5.A.3. Benchmark and Sampling Requirements; and S5.B.2. Additional Sampling Requirements for Specific Industrial Groups	*Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and "visible oil sheen") and compare the average value to the benchmark value.*	Summary of Change: Language added to specify methodology for averaging multiple values collected during a single 24-hr period. Existing Permit Language: *Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and "visible oil sheen") and compare the average value to the benchmark value.* [Clarifying Language Added:] *<u>However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the daily average of the individual grab sample results collected during that 24-hour period; then use the daily average to calculate a quarterly average.</u>*
S5.B. Table 3: Additional Benchmarks and Sampling Requirements Applicable to Specific Industries	Summary: Limited TPH-Dx sampling/benchmark to SICs 10xx, 33xx, 34xx, 5015, 5093, and Hazardous Waste Treatment, Storage and Disposal Facilities	Summary of Change: Expanded the applicability of Petroleum Hydrocarbons Benchmark (10 mg/L NWTPH-Dx) to Transportation Facilities in SICs 40xx – 45xx (except 4221-25), and Petroleum Bulk Stations and Terminals (5171). Refer to Condition S5.B. Table 3.
S5.C Landfills and Airports Subject to Effluent Limitation Guidelines	N/A	Add: Ammonia (Total as N); 14.7 mg/L Maximum Daily Limit Affected Facilities: Airports with 1,000+ annual jet departures that use urea-containing deicing products

Permit Section(s)	2010 ISGP	2015 ISGP
		Refer to Condition S5.C. Table 5
S6. Discharges to Impaired Waterbodies		
S6.C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waterbodies and Puget Sound Sediment Cleanup Sites	N/A	[Clarifying Language Added:] *If an outfall is subject to an impaired waterbody effluent limit (Condition S6.C) for a parameter that also has a benchmark (Condition S5), the effluent limit supersedes the benchmark.*
S6.C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waterbodies and Puget Sound Sediment Cleanup Sites	Summary of 2010 ISGP: If receiving water is Category 5 for Sediment: • Sample TSS quarterly • 30 mg/L TSS limit, effective 1/1/10; unless compliance schedule granted.	Summary of Change: If receiving water is Category 5 for Sediment: • Sample TSS quarterly • 30 mg/L TSS limit, effective 1/1/17; but if discharge was subject to TSS limit under 2010 ISGP, TSS limit effective 1/1/15. If Non-Category 5 Puget Sound Sediment Cleanup Site (Defined in Appendix 2): • Sample TSS quarterly • 30 mg/L TSS benchmark, effective 1/1/17 • If discharge is subject to different TSS benchmarks, the lower benchmark controls. Discharges to ISGP-defined Puget Sound Sediment Cleanup Sites are subject to additional storm drain line cleaning BMPs, solids sampling, and reporting. (See S6.C)
S6.D. Requirements for Discharges to Waters with Applicable TMDLs	N/A	[Clarifying Language Added:] *If an outfall is subject to a TMDL-related effluent limit (Condition S6.D) for a parameter that also has a benchmark (Condition S5), the effluent limit supersedes the benchmark.*
S8.Corrective Actions		
S8. B.1. Level One Corrective Actions – Operational Source Control BMPs	1. *Within 14 days of receipt of sampling results that indicate a benchmark exceedance:*	[Language added to clarify how the 14-day response time works with quarterly averages (S5.A.3, S5.B.2 and/or S6.C.2.c)] 1. *Within 14 days of receipt of*

Permit Section(s)	2010 ISGP	2015 ISGP
		sampling results that indicate a benchmark exceedance for a given quarter; or, for parameters other than pH or visible oil sheen, the end of the quarter, whichever is later:
S8. C. Level Two Corrective Actions – Structural Source Control BMPs	N/A	[Clarifying Language Added:] *While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.*
S8.D.2.	*A licensed professional engineer, geologist, hydrogeologist, or Certified Professional in Storm Water Quality (CPSWQ) shall design and stamp the portion of the SWPPP that addresses stormwater treatment structures or processes.* *i. Ecology may waive the requirement for a licensed or certified professional upon request of the Permittee and demonstration that the Permittee or treatment device vendor can properly design and install the treatment device; or the treatment BMP doesn't require site-specific design or sizing (e.g., off-the-shelf filtration units, etc.).* *ii. Ecology will not waive the Level 3 requirement for a licensed or certified professional more than one time during the permit cycle.*	*A Qualified Industrial Stormwater Professional shall review the revised SWPPP, sign the SWPPP Certification Form, and certify that it is reasonably expected to meet the ISGP benchmarks upon implementation. Upon written request Ecology may, one time during the permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet ISGP benchmarks upon implementation.*
S8.D. Level Three Corrective Actions – Treatment BMPs	[Summary:] Before installing engineered structures, Permittee shall submit an engineering	[Summary:] Before installing engineered structures, Permittee shall submit an engineering report, plans and specifications, and an

Permit Section(s)	2010 ISGP	2015 ISGP
	report, plans and specifications, and an O&M Manual to Ecology for review in accordance with Chapter 173-240 WAC. (See 2010 Condition S8.D)	O&M Manual to Ecology for review. The engineering report must address 7 elements set forth in S8.D.3.a. O&M Manual submitted to Ecology no later than 30 days after installation. (See 2015 ISGP Condition S8.D) [Clarifying Language Added:] *While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.*
S9. Reporting and Recordkeeping		
S9.A Discharge Monitoring Reports	[Summary:] DMRs and other written reports must be submitted electronically or by mail.	[Summary:] DMRs and other written reports must be submitted electronically (Water Quality Permitting Portal), unless waiver granted. Clarified first DMR due date when facility obtains permit coverage mid-permit cycle.
S9.B. Annual Reports	N/A	Clarified that Annual Reports are not required if the permittee didn't have permit coverage during the previous calendar year.
S9.B. Annual Reports	N/A	[Clarifying Language Added:] *Primary airport permittees with at least 1,000 annual jet departures shall include a certification statement in each annual report that it does not use airfield deicing products that contain urea. Alternatively, permittees shall meet the numeric effluent limit for ammonia in Condition S5.C. Table 5.*
S9.E. Reporting Permit Violations	[Summary:] Written reports of non-compliance must be submitted within 30 days.	[Summary:] Written reports of non-compliance must be submitted within 5 days; may be waived on a case by case basis, if phone notification occurs within 24 hours. All written reports must be submitted electronically, unless waiver granted.

Permit Section(s)	2010 ISGP	2015 ISGP
Appendix 2 - Definitions		
Appendix 2 - Definitions	N/A	[Summary:] Several new definitions added: Airfield Pavement Airside Annual Non-propeller Aircraft Departures Average Daily Average Deicing Discharge Point First Fall Storm Event Outfall Puget Sound Sediment Cleanup Site Responsible Corporate Officer Substantially Identical Discharge Point

Issuance Date: December 3, 2014
Effective Date: January 2, 2015
Expiration Date: December 31, 2019

INDUSTRIAL STORMWATER GENERAL PERMIT

A National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities

State of Washington
Department of Ecology
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions which follow.

Heather R. Bartlett
Water Quality Program Manager
Washington State Department of Ecology

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

December 3, 2024

Bob Gurney
Kenworth RD Center
485 Houser Way N
Renton, WA 98057-5503

WAR310881
Kenworth R&D Center
485 HOUSER WAY N
RENTON, WA 98055

RE: Coverage under the Industrial Stormwater General Permit: WAR310881

Dear Bob Gurney:

On December 2, 2024, the Washington State Department of Ecology (Ecology) reissued the Industrial Stormwater National Pollutant Discharge Elimination System and State Waste Discharge General Permit (ISGP). The permit becomes effective on January 1, 2025, and expires December 31, 2029. This is your permit coverage letter for Permit Number WAR310881, effective January 1, 2025. Retain this letter with a copy of the permit and Stormwater Pollution Prevention Plan (SWPPP). It is the official record of permit coverage for your site. For easy access from your site, you may keep your records in an accessible electronic format.

Permit Overview
The new ISGP has a number of changes. The changes are summarized in the fact sheet and Appendix C Addendum to Fact Sheet. You can find copies of the new Industrial Stormwater General Permit, permit forms, and other information at ecology.wa.gov/IndustrialStormwaterPermit.

Discharge Monitoring Reports and Site-Specific Monitoring Requirements
The ISGP requires you to submit quarterly discharge monitoring reports (DMRs) electronically using Ecology's secure online system, WQWebDMR. Find step-by-step instructions on how to register for WQWebDMR and the WQWebDMR User Guide at ecology.wa.gov/programs/wq/permits/paris/webdmr.html If you have questions about using WQWebDMR, contact the Water Quality Information Technology Help Desk at 360-407-7097 or email WQWebPortal@ecy.wa.gov.

We are currently updating our Permit and Reporting Information System (PARIS) database with the site-specific monitoring requirements of the new ISGP, based on the renewal application you submitted earlier this year. We will send you an additional site-specific monitoring summary page with more information after we have finished setting up your monitoring requirements and DMRs in the PARIS database. We will send you this monitoring summary page as soon as possible to support your collection of samples and submitting the first DMR of the permit cycle, due on May 15, 2025.

Permit Fees

State law (RCW 90.48.465) requires that all permittees pay an annual permit fee based upon the state fiscal year. The state fiscal year begins each year on July1 and ends on June 30 the following year. Ecology sends permit fee invoices to all permittees annually. Permittees who have permit coverage on or after July 1 will receive a permit fee invoice for coverage during that state fiscal year. If you would like more information on the permit fee process, visit Ecology's Water Quality Permit Fees webpage (ecology.wa.gov/WQFees) or email the Fee Unit at wqfeeunit@ecy.wa.gov.

Your Right to Appeal

You have a right to appeal the final general permit and general permit coverage for a specific facility to the Pollution Control Hearings Board. Appeals of general permit coverage must be filed within 30 days of the receipt of this coverage letter, where "date of receipt" is defined in RCW 43.21B.001(2). Any appeal is limited to the general permit's applicability or non-applicability to a specific discharger.

The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. For more information regarding your right to appeal, view Appeal of a General Permit Coverage, apps.ecology.wa.gov/publications/SummaryPages/1710007.html.

Permit Administration Assistance

If you have questions regarding your application, updating permit information, finding or completing permit forms, permit transfers or termination, or drafting public notices please contact your permit administrator Alyssa Brewer, ALYB461@ecy.wa.gov, (564) 669-4922.

Ecology Regional Inspector Assistance

If you have questions regarding stormwater management issues at your facility, please contact your regional inspector Amy Jankowiak, ajan461@ecy.wa.gov, (425) 429-4259.

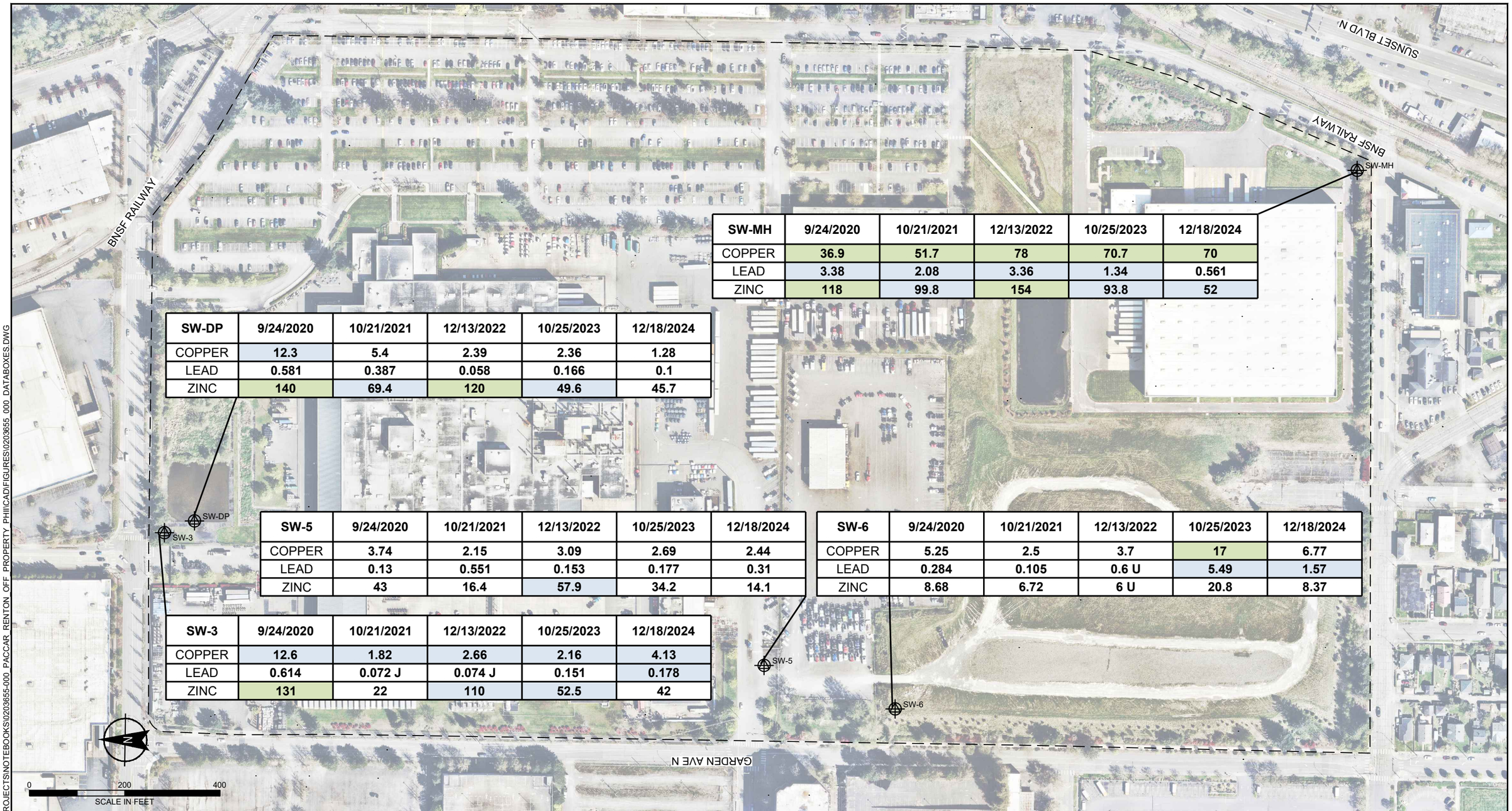
Questions or Additional Information

Ecology is here to help. Please review our permit webpage at ecology.wa.gov/IndustrialStormwaterPermit. If you have any questions about the interpretation or implementation of the new ISGP, please contact Shannon McClellan, Shannon.McClellan@ecy.wa.gov, 360-280-8370.

Sincerely,

Jeff Killelea, Manager
Permit and Technical Services Section
Water Quality Program

APPENDIX B
Surface Water Quality Data Charts, Table, and Figure



SW-MH	9/24/2020	10/21/2021	12/13/2022	10/25/2023	12/18/2024
COPPER	36.9	51.7	78	70.7	70
LEAD	3.38	2.08	3.36	1.34	0.561
ZINC	118	99.8	154	93.8	52

SW-DP	9/24/2020	10/21/2021	12/13/2022	10/25/2023	12/18/2024
COPPER	12.3	5.4	2.39	2.36	1.28
LEAD	0.581	0.387	0.058	0.166	0.1
ZINC	140	69.4	120	49.6	45.7

SW-5	9/24/2020	10/21/2021	12/13/2022	10/25/2023	12/18/2024
COPPER	3.74	2.15	3.09	2.69	2.44
LEAD	0.13	0.551	0.153	0.177	0.31
ZINC	43	16.4	57.9	34.2	14.1

SW-6	9/24/2020	10/21/2021	12/13/2022	10/25/2023	12/18/2024
COPPER	5.25	2.5	3.7	17	6.77
LEAD	0.284	0.105	0.6 U	5.49	1.57
ZINC	8.68	6.72	6 U	20.8	8.37

SW-3	9/24/2020	10/21/2021	12/13/2022	10/25/2023	12/18/2024
COPPER	12.6	1.82	2.66	2.16	4.13
LEAD	0.614	0.072 J	0.074 J	0.151	0.178
ZINC	131	22	110	52.5	42

LEGEND

STORMWATER SAMPLING LOCATION

SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: NEARMAP, APRIL 15, 2025.
3. - = NOT ANALYZED FOR DURING RESPECTIVE EVENT
   ND = NOT DETECTED
4. THE LEAD BENCHMARK OF 64.6 µg/L REFLECTS THE REVISED NUMERIC BENCHMARK IN WASHINGTON'S INDUSTRIAL STORMWATER GENERAL PERMIT, EFFECTIVE 2025.

SUMMARY OF SURFACE WATER MANN-KENDALL STATISTICAL TREND ANLYSIS - 2024

MONITORING WELL	COPPER	LEAD	ZINC
SW-MH	DECREASING	DECREASING	DECREASING
SW-3	STABLE	DECREASING	STABLE
SW-DP	STABLE	DECREASING	STABLE
SW-6	STABLE	PROB. DECREASING	NO TREND
SW-5	PROB. DECREASING	DECREASING	STABLE

SAMPLE ID	CUL (µg/L)	BENCHMARK (µg/L)
COPPER	7	14
LEAD	1	64.6
ZINC	47	117

HALEY ALDRICH

PACCAR SURFACE WATER & GROUNDWATER SUPPORT
RENTON, WASHINGTON

SUMMARY OF SURFACE WATER ANALYTICAL RESULTS

SCALE: AS SHOWN
AUGUST 2025

FIGURE B1

Printed: 8/13/2025 10:51 AM JNOLAN
\\HALEYALDRICH.COM\SHARE\SEA_PROJECTS\NOTEBOOKS\0203655-000_PACCAR_RENTON_OFF_PROPERTY_PHII\CAD\FIGURES\0203655_000_DATABOXES.DWG

TABLE B-1
SUMMARY OF SURFACE WATER ANALYTICAL DATA AND 2005 TO CURRENT STATISTICS
PACCAR RENTON
RENTON, WASHINGTON

Analyte in ug/L	Date	SW-3	SW-3D	SW-5	SW-6	SW-6D	SW-DP	SW-MH	SW-MHD
Copper	3/1/1990	5	-	-	-	-	-	-	-
Copper	11/1/1990	13	-	-	-	-	-	-	-
Copper	4/1/1991	10	-	-	-	-	-	-	-
Copper	10/1/1991	24	-	-	-	-	-	-	-
Copper	3/1/1992	16	-	-	-	-	-	-	-
Copper	10/1/1992	40	-	-	-	-	-	-	-
Copper	3/1/1993	12	-	-	-	-	-	-	-
Copper	10/1/1993	12	-	-	-	-	-	-	-
Copper	2/1/1994	12	-	-	-	-	-	-	-
Copper	10/21/1994	26	-	24	-	-	24	39	-
Copper	3/8/1995	10	-	10	11	-	10	18	-
Copper	10/20/1995	12	-	46	-	-	7	15	-
Copper	10/18/1996	7	-	11	37	-	7	32	-
Copper	10/28/1997	7.8	-	20	7.8	-	8.4	34	-
Copper	3/23/1998	6.5	-	4.7	9.8	7.5	18	31	-
Copper	10/28/1998	5.2	-	84	86	-	8.2	12	11
Copper	3/3/1999	6.2	-	2.7	12	-	7.6	11	11
Copper	10/29/1999	2.4	-	3.7	5.7	-	19	7.4	-
Copper	5/26/2000	4.4	-	3	2.9	-	4.6	27.4	26.4
Copper	10/16/2000	44.6	43	9.9	5.8	-	52.1	14.2	-
Copper	3/13/2001	9	-	7.1	6.6	-	10.6	25.2	24.5
Copper	10/30/2001	11.7	11.5	6.2	11.6	-	14.1	111	-
Copper	3/28/2002	12.2	-	5.8	10	-	22.1	108	118
Copper	11/6/2002	33.7	-	5.2	16.5	-	46.5	135	140
Copper	4/7/2003	30.7	-	5.7	10.6	-	16.6	85	77.2
Copper	10/8/2003	25.9	-	9.5	53.9	-	6.3	205	201
Copper	3/30/2004	11.4	-	5.4	3.5	-	4.4	137	135
Copper	11/2/2004	2.4	-	3.6	5.4	-	4.2	64.3	64.5
Copper	4/7/2005	4.3	-	3.3	5.6	-	5.1	71.7	72.5
Copper	11/1/2005	2.6	-	3.9	5.8	-	3.2	73.9	76.2
Copper	3/28/2006	3.5	-	4.4	4.5	-	4.6	89.8	95.1
Copper	10/19/2006	4.2	-	5.7	3.6	-	4	146	138
Copper	3/22/2007	4.1	-	3.9	4	-	2.6	163	170
Copper	10/25/2007	2.4	-	3.1	5.4	-	1.9	109	170
Copper	3/26/2008	2.3	-	3.2	4.8	-	1.2	67.3	65
Copper	3/25/2009	2.4	-	4.7	3.5	-	1.5	61	61.9
Copper	10/15/2009	2.6 J	-	3.2	3.6	-	3	72	61.9
Copper	3/31/2010	3	-	6.6	4.8	-	1.4	33.4	33.8
Copper	10/22/2010	0.9	-	1.5	3.6	-	0.9	20.3	19.9
Copper	3/28/2011	4.4	-	2.8	3.3	-	1.5	20	19.9
Copper	10/28/2011	5.3	-	2.9	2.8	-	1.8	43	45.8
Copper	3/21/2012	2.3	-	3.6	3.3	-	2.3	32	32
Copper	11/13/2012	3.4	-	5.3	4.4	-	2.4	59.4	59.1
Copper	3/11/2013	1.4	-	2.1	4.2	-	2.3	42.4	42.2
Copper	3/28/2014	2	-	2.4	10.1	-	2.7	34.1	34.4
Copper	4/13/2015	8.9	8.9	9.1	3.5	-	1.7	22.2	-
Copper	3/10/2016	1	-	11.4	7.7	-	1.1	40.1	39.5
Copper	4/11/2017	2.98	-	2.52	6.87	-	1.37	28	-
Copper	4/18/2018	1.84	-	2.79	4.31	-	1.71	3.14	-
Copper	6/20/2019	2.47	-	5.28	3.75	-	2.73	44.7	-
Copper	9/24/2020	12.6	-	3.74	5.25	-	12.3	36.9	-
Copper	10/21/2021	1.82	-	2.15	2.5	-	5.4	51.7	53
Copper	12/13/2022	2.66	-	3.09	3.7	-	2.39	78	82.4
Copper	10/25/2023	2.16	-	2.69	17	-	2.36	70.7	70.8
Copper	12/18/2024	4.13	-	2.44	6.77	-	1.28	70	69.7
Copper Statistics from 2005 to current:									
Mean		3.395	-	3.993	5.135	-	2.768	58.657	68.777
Median		2.6	-	3.2	4.31	-	2.3	51.7	61.9
Std Dev		2.433	-	2.187	2.895	-	2.246	36.778	42.153
GeoMean		2.86	-	3.582	4.663	-	2.293	47.125	58.477
Count		27	-	27	27	-	27	27	22
Min		0.9	-	1.5	2.5	-	0.9	3.14	19.9
Max		12.6	-	11.4	17.0	-	12.3	163.0	170.0
# Greater Benchmark (14 ug/L)		0	-	0	1	-	0	26	22
# Greater CUL (7 ug/L)		2	-	2	3	-	1	26	22

TABLE B-1
SUMMARY OF SURFACE WATER ANALYTICAL DATA AND 2005 TO CURRENT STATISTICS
PACCAR RENTON
RENTON, WASHINGTON

Analyte in ug/L	Date	SW-3	SW-3D	SW-5	SW-6	SW-6D	SW-DP	SW-MH	SW-MHD
Hexavalent Chromium	3/1/1990	1 U	-	-	-	-	-	-	-
Hexavalent Chromium	11/1/1990	**5**	-	-	-	-	-	-	-
Hexavalent Chromium	4/1/1991	5 U	-	-	-	-	-	-	-
Hexavalent Chromium	10/1/1991	**10**	-	-	-	-	-	-	-
Hexavalent Chromium	3/1/1992	**12**	-	-	-	-	-	-	-
Hexavalent Chromium	10/1/1992	**20**	-	-	-	-	-	-	-
Hexavalent Chromium	3/1/1993	10 U	-	-	-	-	-	-	-
Hexavalent Chromium	10/1/1993	10 U	-	-	-	-	-	-	-
Hexavalent Chromium	2/1/1994	10 U	-	-	-	-	-	-	-
Hexavalent Chromium	10/21/1994	10 U	-	10 U	-	-	10 U	10 U	-
Hexavalent Chromium	3/8/1995	10 U	-	10 U	-	-	10 U	**13**	-
Hexavalent Chromium	10/20/1995	5 U	-	**18**	10 U	-	5 U	**7.4**	-
Hexavalent Chromium	10/18/1996	5 U	-	**6.4**	**16**	-	5 U	**11**	-
Hexavalent Chromium	10/28/1997	**9.4**	-	**8.5**	**13**	-	**9.8**	**8**	-
Hexavalent Chromium	3/23/1998	10 U	-	10 U	10 U	0.01 U	10 U	10 U	-
Hexavalent Chromium	10/28/1998	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	3/3/1999	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	10/29/1999	10 U	-	10 U	10 U	-	10 U	10 U	-
Hexavalent Chromium	5/26/2000	20 U	-	20 U	10 U	-	20 U	60 U	60 U
Hexavalent Chromium	10/16/2000	110 U	110 U	10 U	10 U	-	230 U	10 U	-
Hexavalent Chromium	3/13/2001	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	10/30/2001	0.01 U	0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	-
Hexavalent Chromium	3/28/2002	5 U	-	5 U	5 U	-	**14**	5 U	5 U
Hexavalent Chromium	11/6/2002	60 U	-	10 U	10 U	-	60 U	10 U	10 U
Hexavalent Chromium	4/7/2003	11 U	-	11 U	11 U	-	11 U	11 U	11 U
Hexavalent Chromium	10/8/2003	11 U	-	11 U	11 U	-	11 U	11 U	11 U
Hexavalent Chromium	3/30/2004	11 U	-	11 U	11 U	-	11 U	11 U	11 U
Hexavalent Chromium	11/2/2004	11 U	-	11 U	11 U	-	11 U	11 U	11 U
Hexavalent Chromium	4/7/2005	**0.6**	-	**0.6**	**0.5**	-	**0.8**	**4.9**	3.7 U
Hexavalent Chromium	11/1/2005	11 U	-	11 U	11 U	-	11 U	11 U	11 U
Hexavalent Chromium	3/28/2006	11 U	-	11 U	11 U	-	11 U	**19**	11 U
Hexavalent Chromium	10/19/2006	11 U	-	11 U	11 U	-	11 U	**26**	**17**
Hexavalent Chromium	3/22/2007	11 U	-	11 U	11 U	-	11 U	11 U	**12**
Hexavalent Chromium	10/25/2007	11 U	-	11 U	11 U	-	11 U	11 U	11 U
Hexavalent Chromium	3/26/2008	12 U	-	12 U	12 U	-	12 U	12 U	12 U
Hexavalent Chromium	3/25/2009	10 UJ	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	10/15/2009	10 UJ	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	3/31/2010	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	10/22/2010	10 UJ	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	3/28/2011	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	10/28/2011	10 UJ	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	3/21/2012	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	11/13/2012	10 UJ	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	3/11/2013	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	3/28/2014	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	4/13/2015	10 U	10 U	10 U	10 U	-	10 U	10 U	-
Hexavalent Chromium	3/10/2016	10 U	-	10 U	10 U	-	10 U	10 U	10 U
Hexavalent Chromium	10/21/2021	13 U	-	13 U	13 U	-	13 U	13 U	13 U
Hexavalent Chromium	12/13/2022	13 U	-	13 U	13 U	-	13 U	13 U	13 U
Hexavalent Chromium	10/25/2023	13 UJ	-	13 UJ	13 UJ	-	13 UJ	13 UJ	13 UJ
Hexavalent Chromium	12/18/2024	25 UJ	-	25 UJ	25 UJ	-	25 UJ	25 UJ	25 UJ
Hexavalent Chromium Statistics from 2005 to current:									
Mean		10.939	-	10.939	10.935	-	10.948	12.126	11.441
Std Dev		3.868	-	3.868	3.88	-	3.843	4.853	3.817
GeoMean		9.806	-	9.806	9.728	-	9.929	11.421	10.897
Count		23	-	23	23	-	23	23	22
Min		0.60	-	0.60	0.50	-	0.80	4.90	3.70
Max		25	-	25	25	-	25	26	25
# Greater CUL (11 ug/L)		0 (U qualifier)	-	0 (U qualifier)	0 (U qualifier)	-	0 (U qualifier)	2 (U qualifier)	2 (U qualifier)

TABLE B-1
SUMMARY OF SURFACE WATER ANALYTICAL DATA AND 2005 TO CURRENT STATISTICS
PACCAR RENTON
RENTON, WASHINGTON

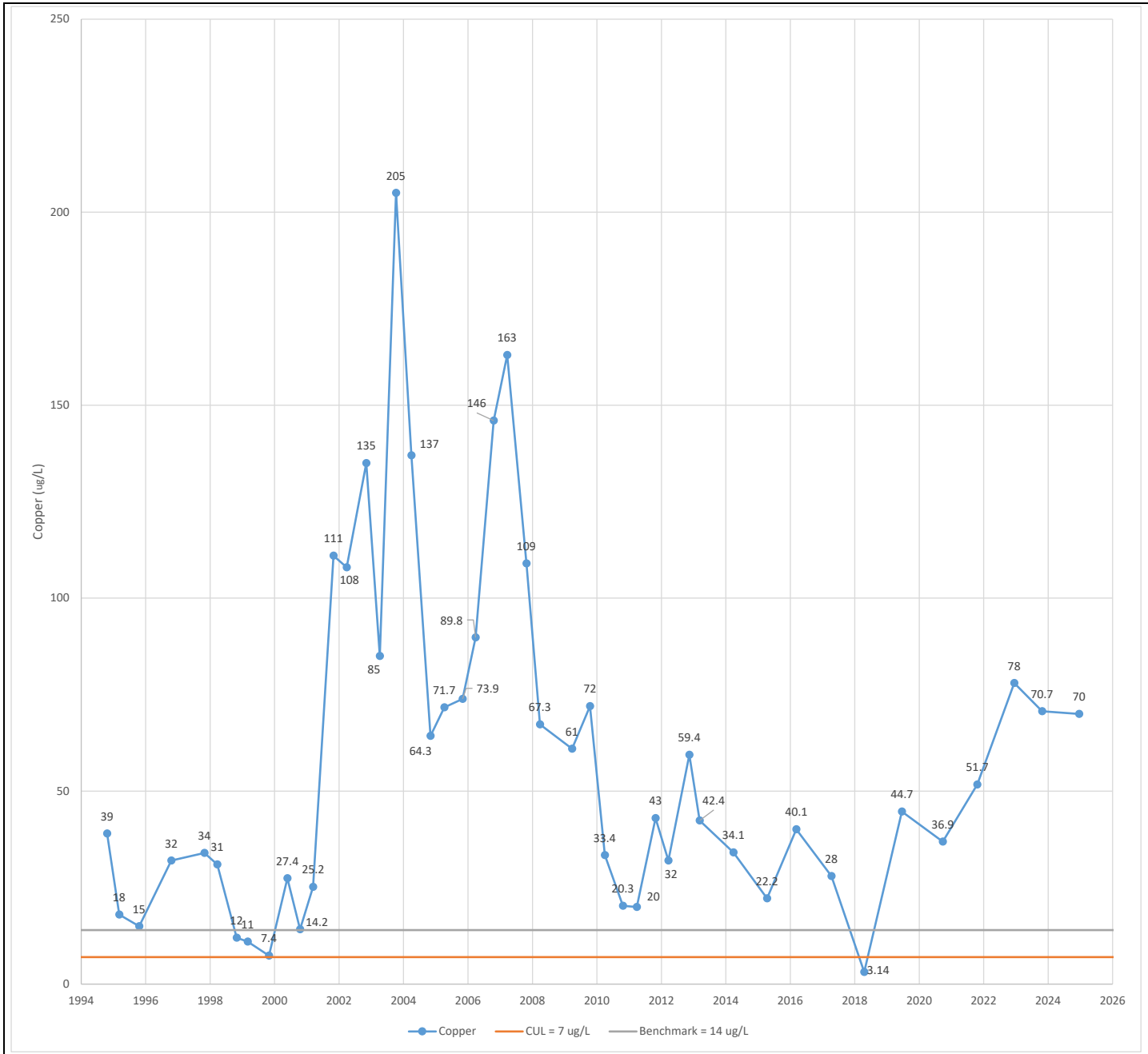
Analyte in ug/L	Date	SW-3	SW-3D	SW-5	SW-6	SW-6D	SW-DP	SW-MH	SW-MHD
Lead	3/1/1990	5 U	-	-	-	-	-	-	-
Lead	11/1/1990	**13**	-	-	-	-	-	-	-
Lead	4/1/1991	**1.6**	-	-	-	-	-	-	-
Lead	10/1/1991	**35**	-	-	-	-	-	-	-
Lead	3/1/1992	1 U	-	-	-	-	-	-	-
Lead	10/1/1992	**50**	-	-	-	-	-	-	-
Lead	3/1/1993	**6.7**	-	-	-	-	-	-	-
Lead	10/1/1993	3 U	-	-	-	-	-	-	-
Lead	2/1/1994	**13**	-	-	-	-	-	-	-
Lead	10/21/1994	3 U	-	3 U	-	-	-	**10**	-
Lead	3/8/1995	**4.1**	-	**8.1**	**8.6**	-	3 U	**20**	-
Lead	10/20/1995	**10**	-	**51**	-	-	3 U	**9.3**	-
Lead	10/18/1996	**5.7**	-	**6.1**	**54**	-	**1.1**	**70**	-
Lead	10/28/1997	**3.8**	-	**15**	**5.2**	-	**2.9**	**11**	-
Lead	3/23/1998	**5.2**	-	**2**	**3.3**	**3.3**	**2.7**	**33**	-
Lead	10/28/1998	**1.5**	-	**1.6**	**1.9**	-	**1.9**	**5.9**	**5.5**
Lead	3/3/1999	**3.8**	-	1 U	**16**	-	**2.7**	**6.7**	**6.1**
Lead	10/29/1999	**1.5**	-	1 U	**1.1**	-	**4**	1 U	-
Lead	5/26/2000	**3**	-	**2**	1 U	-	**7**	**12**	**11**
Lead	10/16/2000	**10**	**9**	**14**	**7**	-	**17**	**10**	-
Lead	3/13/2001	**3**	-	**1**	1 U	-	**2**	**24**	**26**
Lead	10/30/2001	**4**	**3**	**5**	**3**	-	**7**	**10**	-
Lead	3/28/2002	**4**	-	**4**	**7**	-	**3**	**12**	**11**
Lead	11/6/2002	**4**	-	**2**	**4**	-	**6**	**10**	**10**
Lead	4/7/2003	**6**	-	**2**	**2**	-	**3**	**16**	**15**
Lead	10/8/2003	**5**	-	**5**	**22**	-	**2**	**7**	**7**
Lead	3/30/2004	**1**	-	1 U	1 U	-	**1**	**9**	**10**
Lead	11/2/2004	1 U	-	1 U	1 U	-	1 U	**7**	**7**
Lead	4/7/2005	1 U	-	1 U	1 U	-	1 U	**7**	**7**
Lead	11/1/2005	**1**	-	**1**	1 U	-	**1**	**7**	**7**
Lead	3/28/2006	1 U	-	1 U	1 U	-	1 U	**6**	**6**
Lead	10/19/2006	1 U	-	1 U	1 U	-	1 U	**3**	**3**
Lead	3/22/2007	1 U	-	1 U	1 U	-	1 U	**8**	**8**
Lead	10/25/2007	1 U	-	1 U	**1**	-	1 U	**6**	**8**
Lead	3/26/2008	1 U	-	1 U	1 U	-	1 U	**4**	**4**
Lead	3/25/2009	1 U	-	**1**	1 U	-	1 U	**12**	**12**
Lead	10/15/2009	1 U	-	1 U	1 U	-	1 U	**2**	**2**
Lead	3/31/2010	1 U	-	**1**	1 U	-	1 U	**3**	**3**
Lead	10/22/2010	1 U	-	1 U	1 U	-	1 U	**1**	**1**
Lead	3/28/2011	**1**	-	1 U	1 U	-	1 U	**2**	**2**
Lead	10/28/2011	**2.2**	-	**4**	**0.2**	-	**0.4**	**8.2**	**8.4**
Lead	3/21/2012	**0.1**	-	**0.6**	0.1 U	-	**0.7**	**1.3**	**1.3**
Lead	11/13/2012	**0.2**	-	**0.5**	0.1 U	-	**0.4**	**1.3**	**1.2**
Lead	3/11/2013	0.1 U	-	**0.3**	0.1 U	-	**0.7**	**0.7**	**0.7**
Lead	3/28/2014	**0.5**	-	**0.5**	**3.9**	-	**0.5**	**3.2**	**3.1**
Lead	4/13/2015	**1.7**	**1.8**	**2.3**	0.1 U	-	**0.3**	**1**	-
Lead	3/10/2016	**0.3**	-	**5.2**	**1.2**	-	0.1 U	**4**	**4.1**
Lead	4/11/2017	**0.605**	-	**0.372**	**0.917**	-	**0.102**	**2.78**	-
Lead	4/18/2018	**0.075**	-	**0.265**	**0.181**	-	**0.085**	**0.295**	-
Lead	6/20/2019	**1.21**	-	**1.52**	**0.356**	-	**0.255**	**1.05**	-
Lead	9/24/2020	**0.614**	-	**0.13**	**0.284**	-	**0.581**	**3.38**	-
Lead	10/21/2021	**0.072** J	-	**0.551**	**0.105**	-	**0.387**	**2.08**	**2.28**
Lead	12/13/2022	**0.074** J	-	**0.153**	0.6 U	-	**0.058**	**3.36**	**2.67**
Lead	10/25/2023	**0.151**	-	**0.177**	**5.49**	-	**0.166**	**1.34**	**1.24**
Lead	12/18/2024	**0.178**	-	**0.31**	**1.57**	-	**0.1**	**0.561**	**0.535**
Lead Statistics from 2005 to current:									
Mean		0.744	-	1.07	1.008	-	0.623	3.539	4.024
Std Dev		0.536	-	1.133	1.167	-	0.381	2.904	3.144
GeoMean		0.494	-	0.729	0.596	-	0.454	2.483	2.904
Count		27	-	27	27	-	27	27	22
Min		0.072	-	0.13	0.1	-	0.058	0.295	0.535
Max		2	-	5	5	-	1	12	12
# Greater Benchmark (64.6 ug/L)		0	-	0	0	-	0	0	0
# Greater CUL (1 ug/L)		3	-	4	4	-	0	22	19

TABLE B-1
SUMMARY OF SURFACE WATER ANALYTICAL DATA AND 2005 TO CURRENT STATISTICS
PACCAR RENTON
RENTON, WASHINGTON

Analyte in ug/L	Date	SW-3	SW-3D	SW-5	SW-6	SW-6D	SW-DP	SW-MH	SW-MHD
Zinc	3/1/1990	**11**	-	-	-	-	-	-	-
Zinc	11/1/1990	**76**	-	-	-	-	-	-	-
Zinc	4/1/1991	**33** J	-	-	-	-	-	-	-
Zinc	10/1/1991	**89**	-	-	-	-	-	-	-
Zinc	3/1/1992	**170**	-	-	-	-	-	-	-
Zinc	10/1/1992	**29**	-	-	-	-	-	-	-
Zinc	3/1/1993	**81**	-	-	-	-	-	-	-
Zinc	10/1/1993	**140**	-	-	-	-	-	-	-
Zinc	2/1/1994	**66**	-	-	-	-	-	-	-
Zinc	10/21/1994	**34**	-	**17**	-	-	**74**	**95**	-
Zinc	3/8/1995	**80**	-	**25**	-	-	**100**	**140**	-
Zinc	10/20/1995	**50**	-	**80**	**110**	-	**59**	**88**	-
Zinc	10/18/1996	**28**	-	**25**	**61**	-	**53**	**270**	-
Zinc	10/28/1997	**130**	-	**87**	**14**	-	**130**	**270**	-
Zinc	3/23/1998	**59**	-	**53**	**45**	**57**	**110**	**230**	-
Zinc	10/28/1998	**23**	-	**23**	**31**	-	**56**	**230**	**210**
Zinc	3/3/1999	**62**	-	**20**	**34**	-	**69**	**150**	**140**
Zinc	10/29/1999	**25**	-	**81**	**23**	-	**160**	**140**	-
Zinc	5/26/2000	**64**	-	**60**	**5**	-	**75**	**170**	**160**
Zinc	10/16/2000	**115**	**112**	**143**	**23**	-	**129**	**80**	-
Zinc	3/13/2001	**55**	-	**71**	**11**	-	**60**	**142**	**139**
Zinc	10/30/2001	**215**	**198**	**57**	**57**	-	**102**	**129**	-
Zinc	3/28/2002	**78**	-	**60**	**40**	-	**70**	**340**	**380**
Zinc	11/6/2002	**119**	-	**71**	**37**	-	**151**	**145**	**145**
Zinc	4/7/2003	**80**	-	**54**	**41**	-	**100**	**160**	**130**
Zinc	10/8/2003	**73**	-	**215**	**122**	-	**70**	**203**	**202**
Zinc	3/30/2004	**50**	-	**19**	**4**	-	**48**	**196**	**201**
Zinc	11/2/2004	**56**	-	**29**	**5**	-	**56**	**88**	**86**
Zinc	4/7/2005	**91**	-	**36**	**10**	-	**100**	**110**	**120**
Zinc	11/1/2005	**64**	-	**47**	**11**	-	**74**	**101**	**103**
Zinc	3/28/2006	**73**	-	**51**	**6**	-	**73**	**126**	**141**
Zinc	10/19/2006	**65**	-	**40**	**11**	-	**70**	**139**	**129**
Zinc	3/22/2007	**20**	-	**14**	**10**	-	**33**	**340**	**380**
Zinc	10/25/2007	**49**	-	**28**	**8**	-	**47**	**181**	**380**
Zinc	3/26/2008	**30**	-	**26**	**6**	-	**54**	**92**	**90**
Zinc	3/25/2009	**48**	-	**32**	**20**	-	**79**	**215**	**250**
Zinc	10/15/2009	**17**	-	**33**	4 U	-	**84**	**192**	**192**
Zinc	3/31/2010	**10**	-	**15**	**5**	-	**60**	**169**	**169**
Zinc	10/22/2010	**18**	-	**8**	4 U	-	**20**	**95**	**92**
Zinc	3/28/2011	**111**	-	**9**	4 U	-	**53**	**99**	**98**
Zinc	10/28/2011	**57**	-	**20**	4 U	-	**36**	**134**	**137**
Zinc	3/21/2012	**7**	-	**18**	4 U	-	**142**	**116**	**118**
Zinc	11/13/2012	**21**	-	**31**	**4**	-	**113**	**136**	**132**
Zinc	3/11/2013	**5**	-	**10**	4 U	-	**69**	**217**	**214**
Zinc	3/28/2014	**18**	-	**22**	**17**	-	**109**	**108**	**106**
Zinc	4/13/2015	**8**	**9**	**50**	4 U	-	**40**	**100**	-
Zinc	3/10/2016	**125**	-	**24**	**10**	-	**81**	**169**	**164**
Zinc	4/11/2017	**41**	-	**14.4**	**54.6**	-	**73.9**	**72.5**	-
Zinc	4/18/2018	**12.3**	-	**9.72**	**2.17**	-	**65.7**	**15.1**	-
Zinc	6/20/2019	**72.2**	-	**40.1**	**8.72**	-	**34.9**	**68.5**	-
Zinc	9/24/2020	**131**	-	**43**	**8.68**	-	**140**	**118**	-
Zinc	10/21/2021	**22**	-	**16.4**	**6.72**	-	**69.4**	**99.8**	**99.6**
Zinc	12/13/2022	**110**	-	**57.9**	6 U	-	**120**	**154**	**153**
Zinc	10/25/2023	**52.5**	-	**34.2**	**20.8**	-	**49.6**	**93.8**	**89.4**
Zinc	12/18/2024	**42**	-	**14.1**	**8.37**	-	**45.7**	**52**	**53.4**
Zinc Statistics from 2005 to current:									
Mean		48.889	-	27.549	9.706	-	71.711	130.100	155.018
Std Dev		37.990	-	14.474	10.186	-	31.968	63.336	85.626
GeoMean		34.161	-	23.696	7.349	-	64.872	114.655	138.202
Count		27	-	27	27	-	27	27	22
Min		5	-	8	2.17	-	20	15.1	53.4
Max		131	-	58	55	-	142	340	380
# Greater Benchmark (117 ug/L)		2	-	0	0	-	3	13	14
# Greater CUL (47 ug/L)		13	-	3	1	-	20	26	22

ABBREVIATIONS AND NOTES:

- : Not analyzed/No statistics performed
J : Estimated value
U : Not detected at indicated reporting limit, for Hexavalent Chromium
Non-detect value is the method detection limit
ug/L : micrograms per liter
No benchmark value established for hexavalent chromium
Statistics were calculated starting in 2005
SW-3D : Duplicate sample of SW-3
SW-6D : Duplicate sample of SW-6
SW-MHD : Duplicate sample of SW-MH
***Bold** denotes a detected concentration*
Blue shading: Exceeded Cleanup Level (CUL)
Green shading: Exceeded Benchmark Level



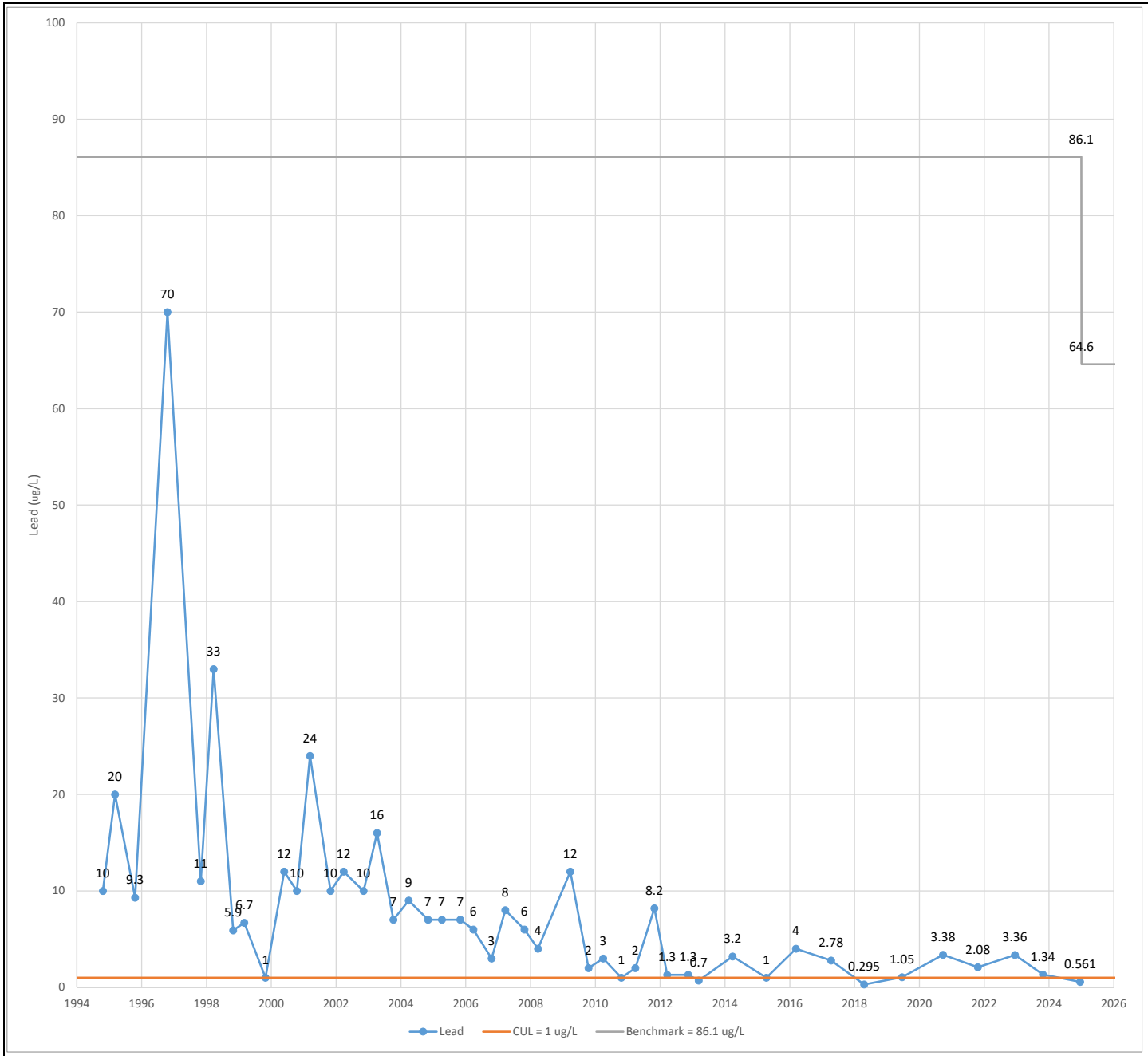
PACCAR INC.
RENTON, WASHINGTON

SW-MH - Copper

AUGUST 2025

HALEY ALDRICH

Chart
B-1



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SW-MH - Lead

AUGUST 2025

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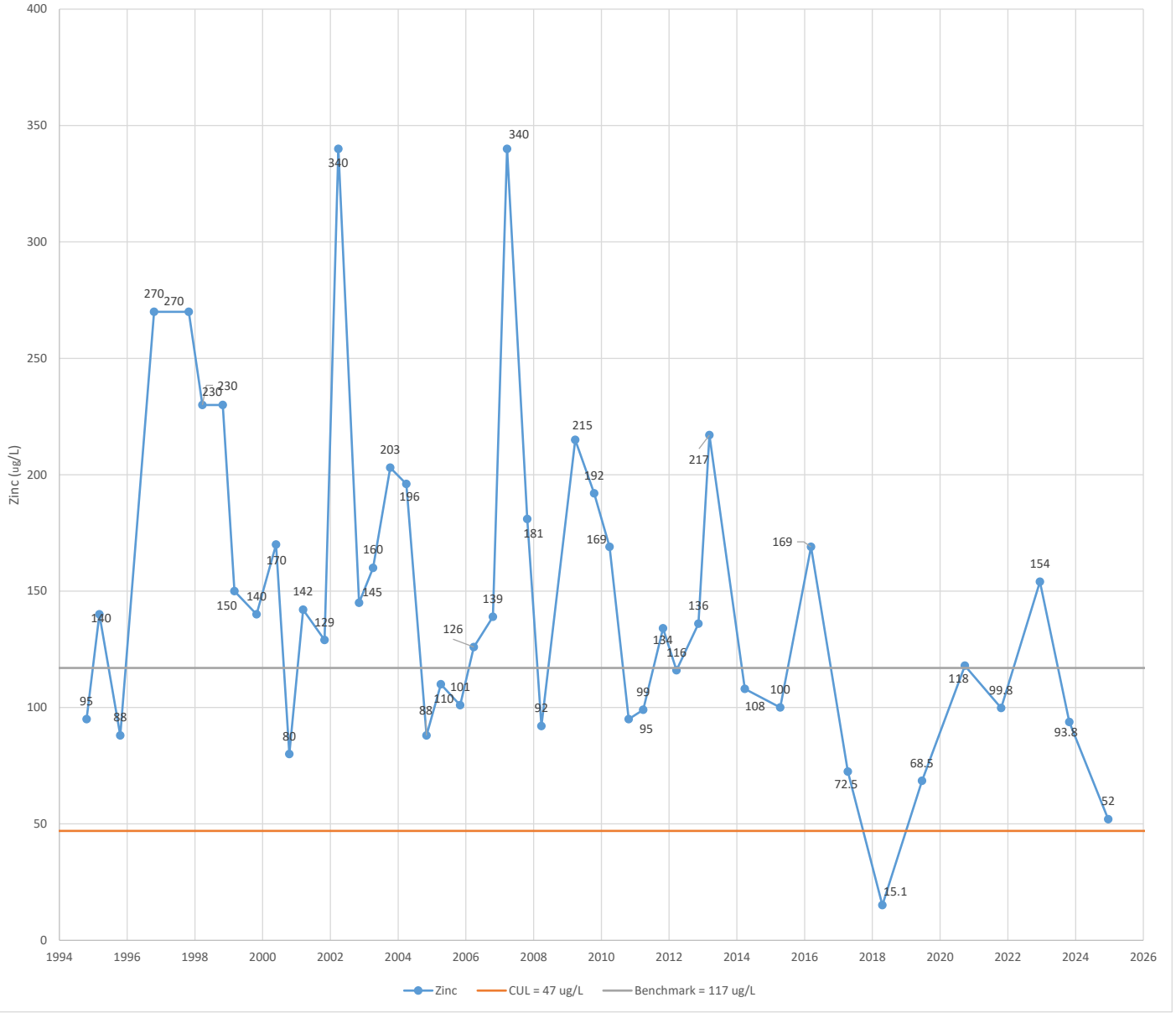
Chart
B-2



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SW-MH - Zinc

AUGUST 2025

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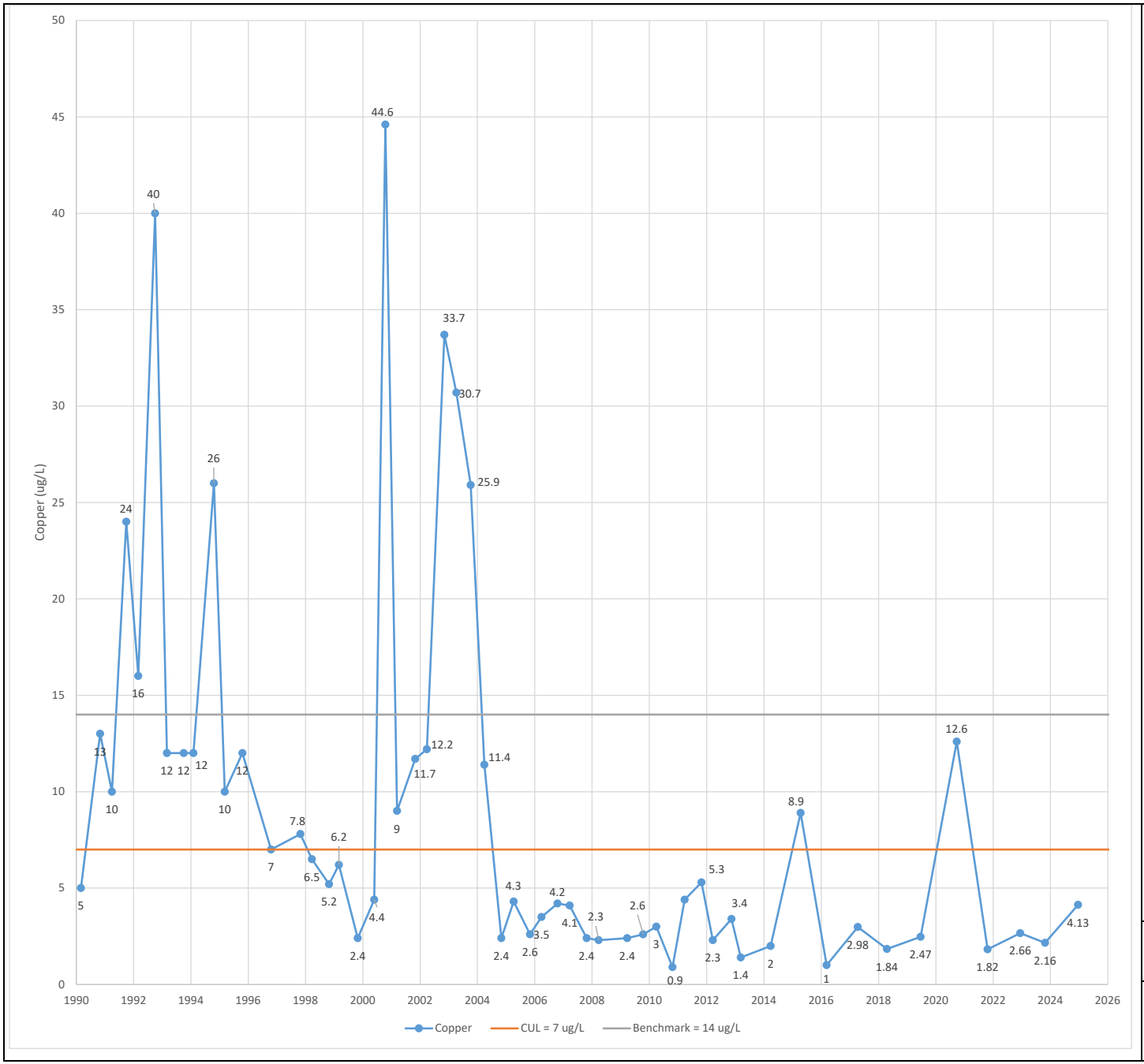
Chart
B-3



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SW-3 - Copper

AUGUST 2025

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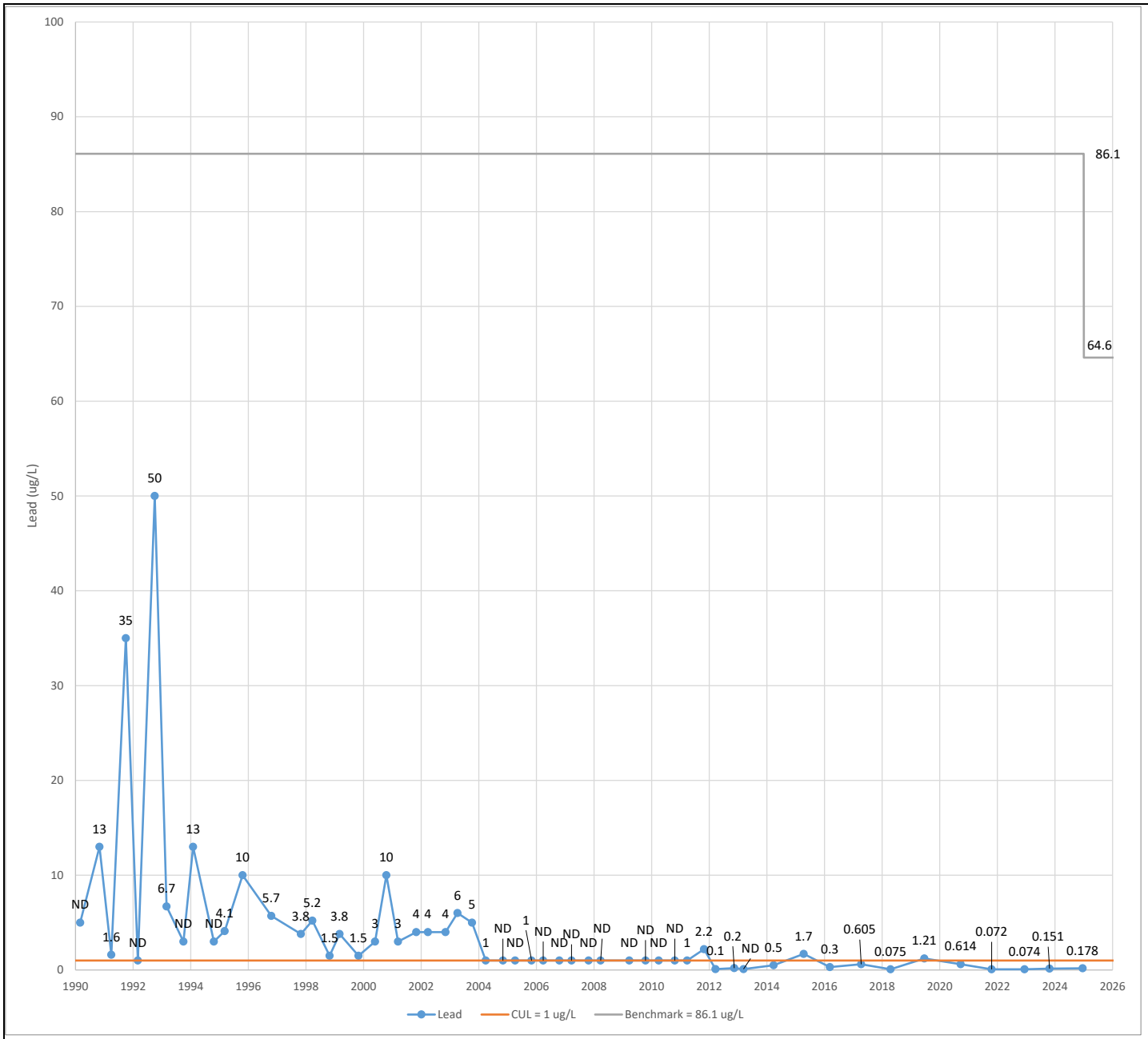
Chart

B-4



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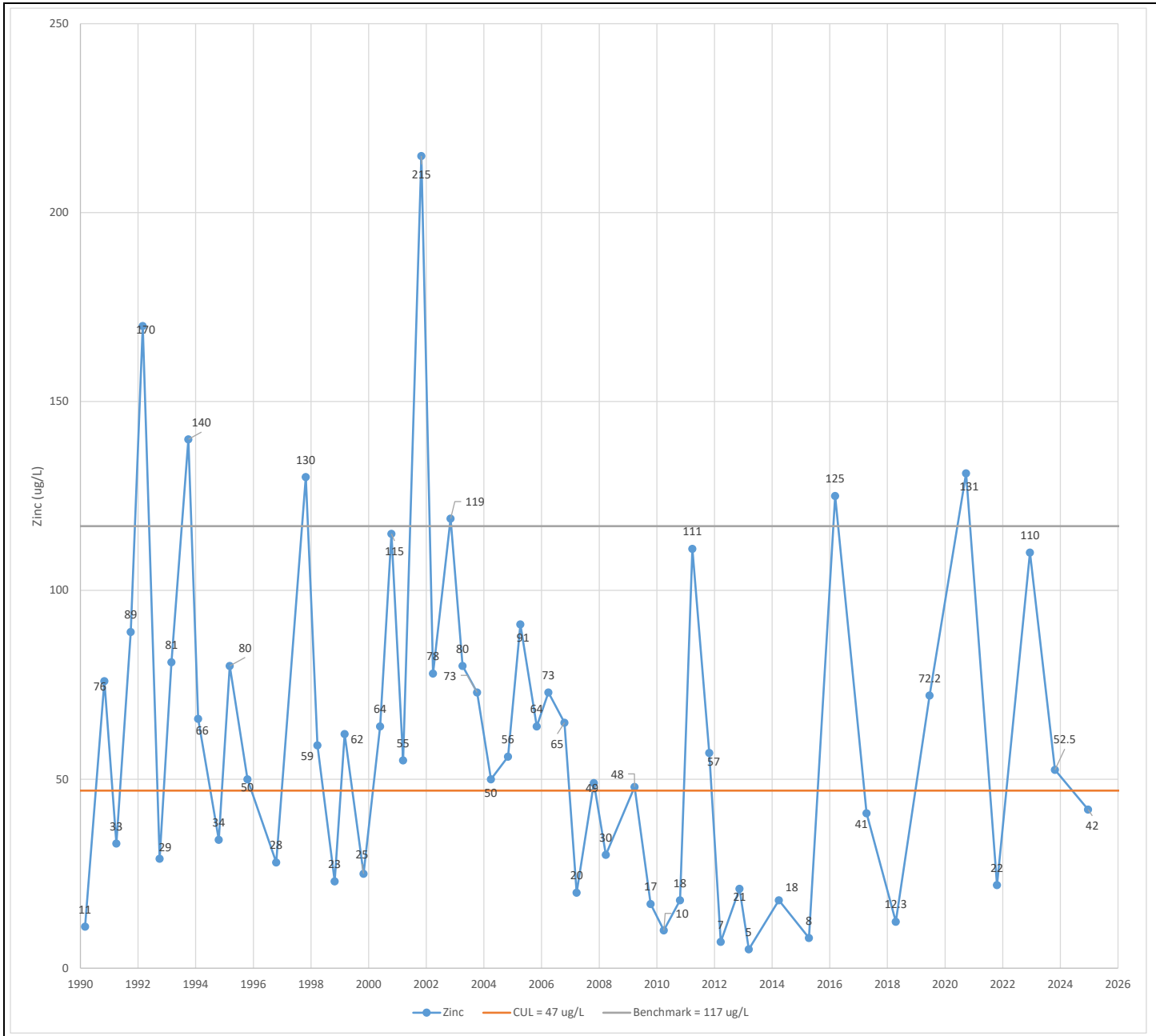
SW-3 - Lead

AUGUST 2025

HALEY ALDRICH

Chart
B-5



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SW-3 - Zinc

AUGUST 2025

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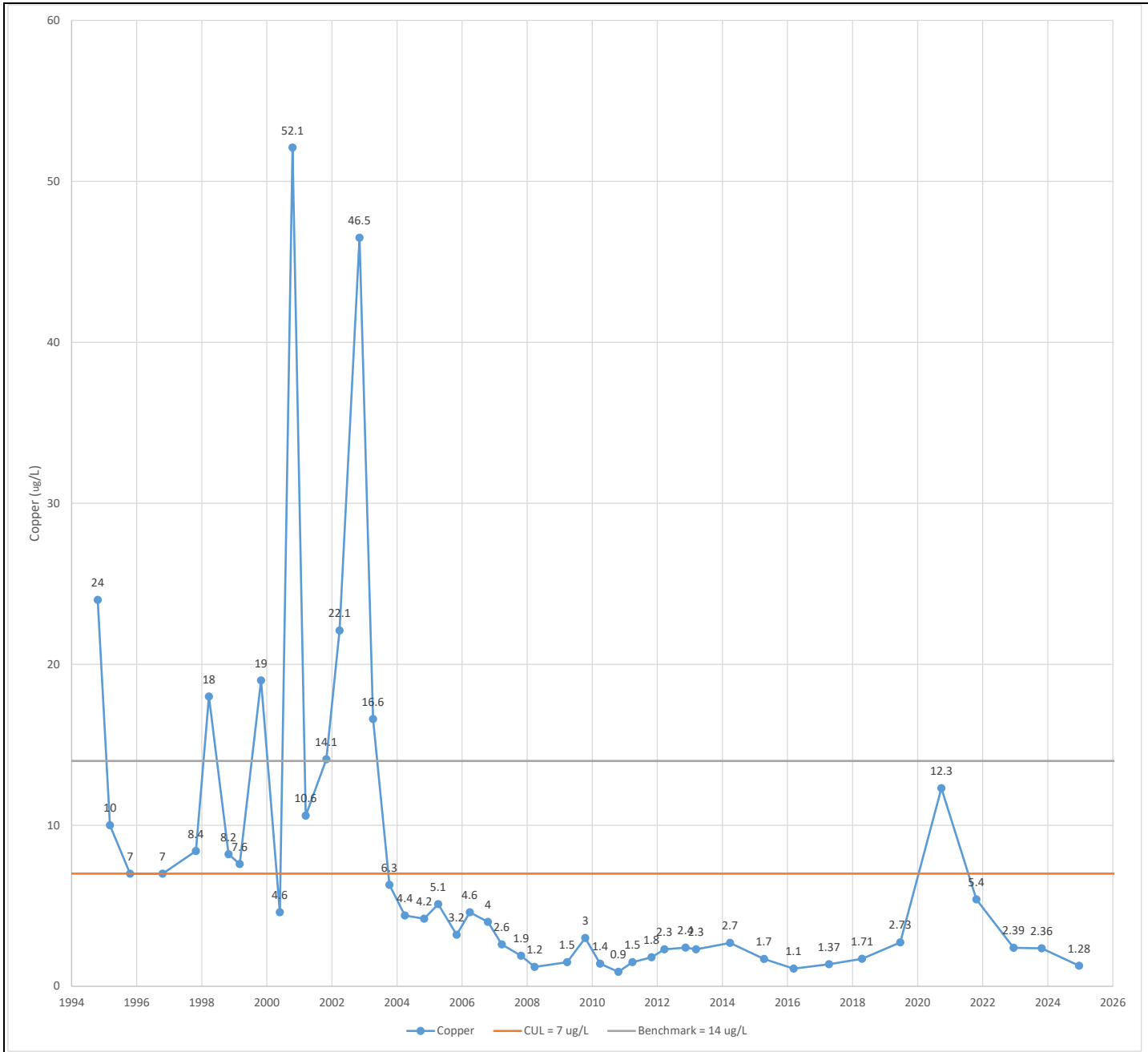
Chart

B-6



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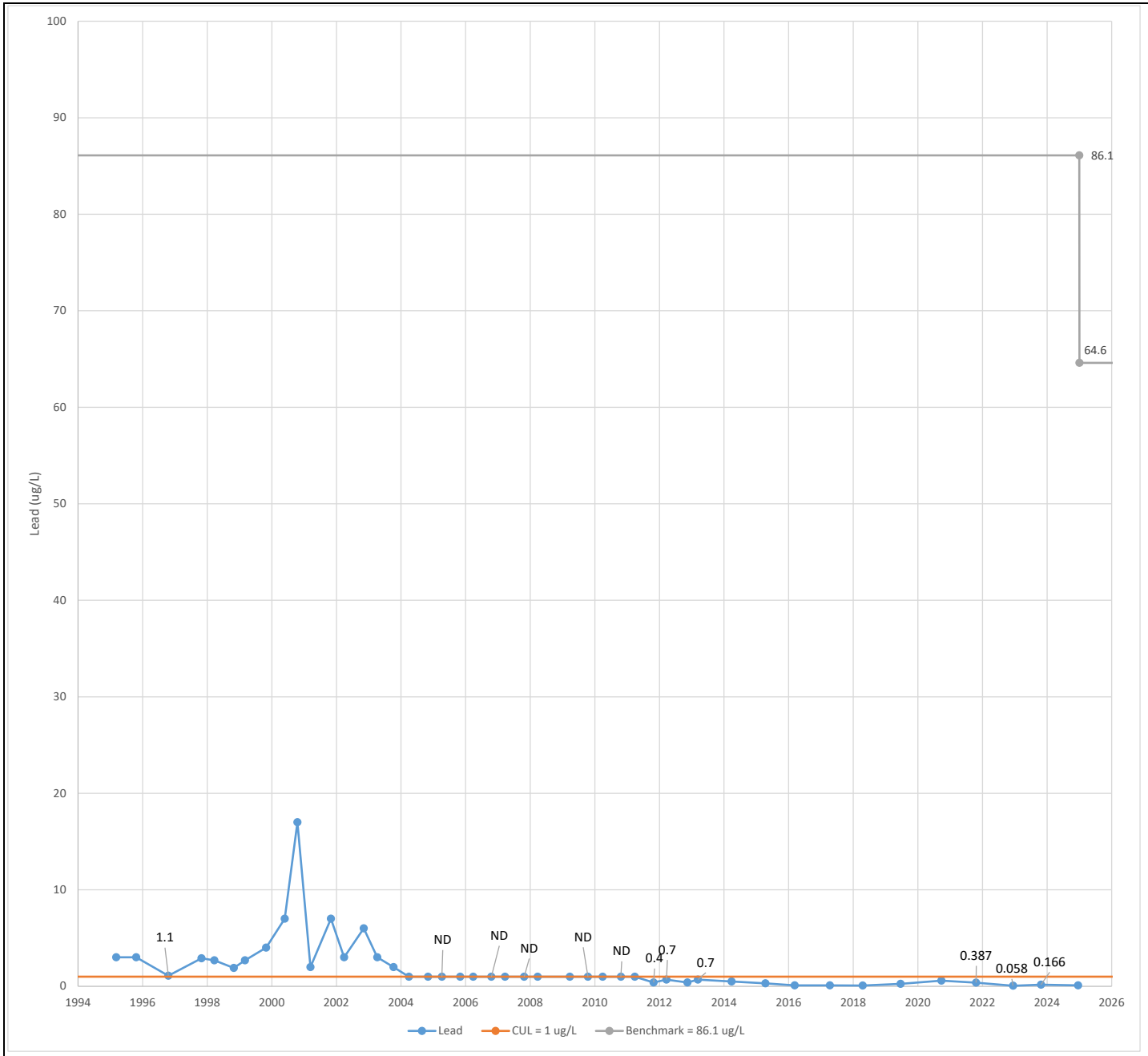
SW-DP - Copper

AUGUST 2025

HALEY ALDRICH

Chart
B-7



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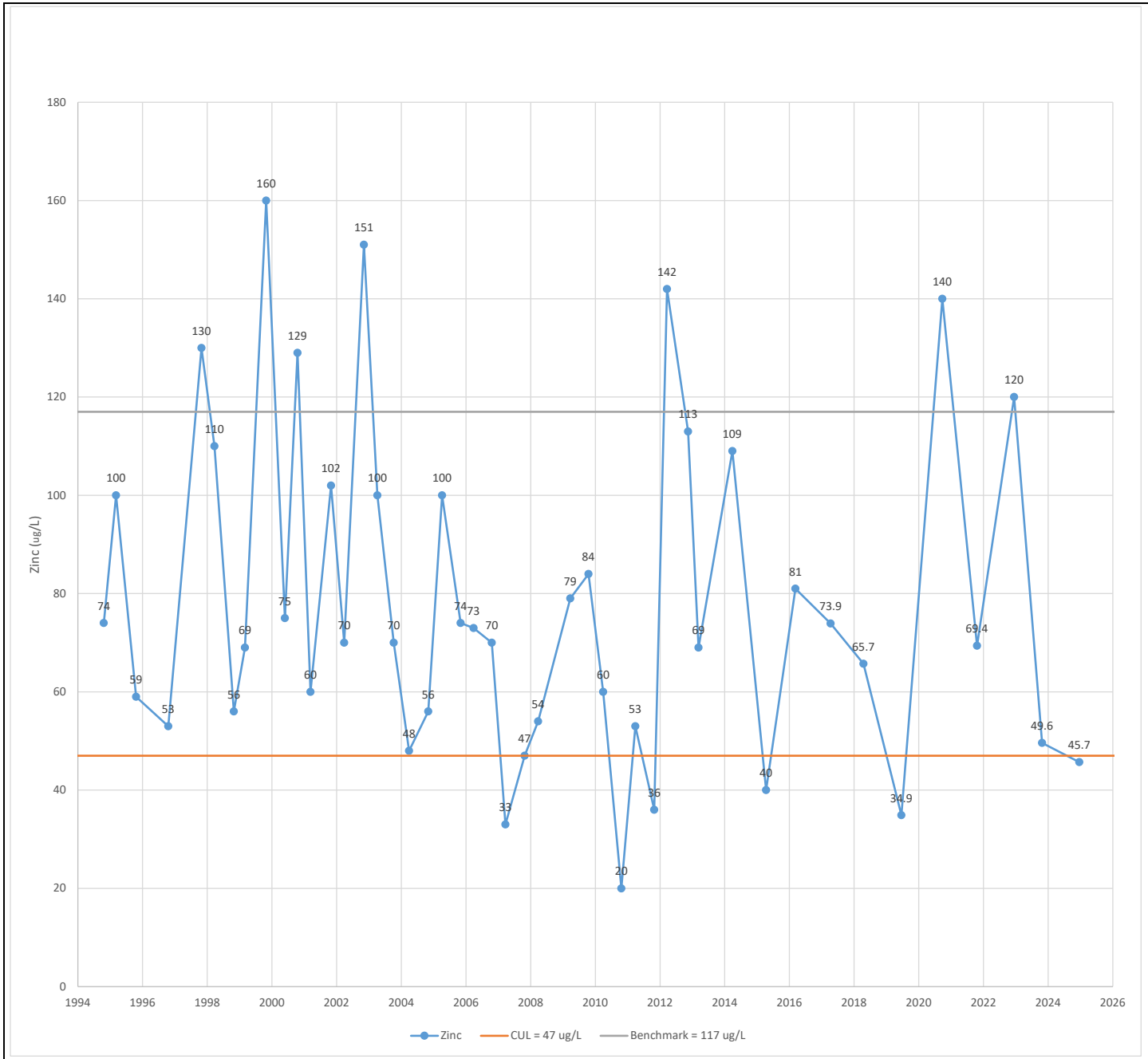
SW-DP - Lead

AUGUST 2025

HALEY ALDRICH

Chart

B-8



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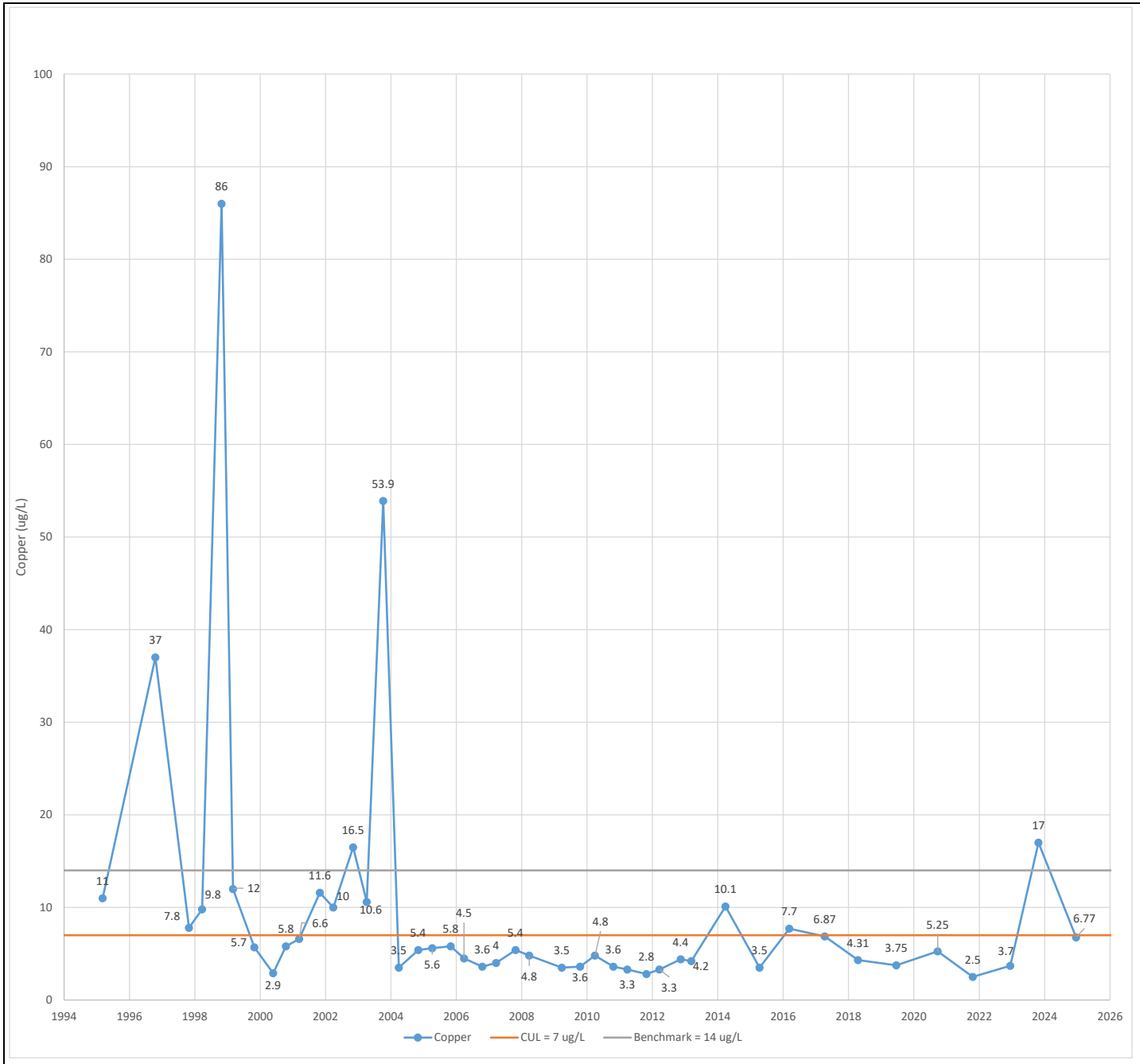
SW-DP - Zinc

AUGUST 2025

HALEY ALDRICH

Chart
B-9



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SW-6 - Copper

AUGUST 2025

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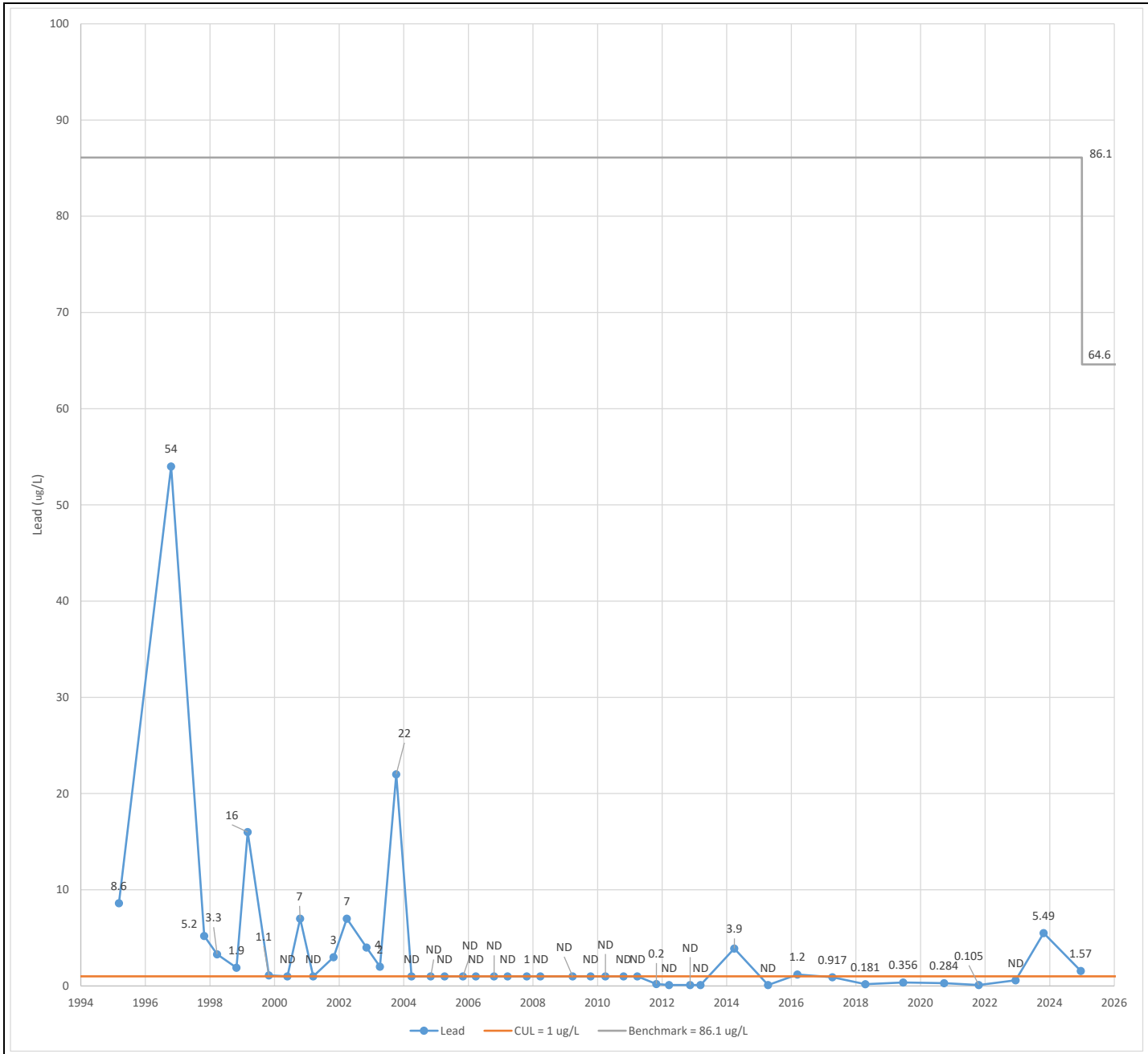
Chart
B-10



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RENTON, WASHINGTON

SW-6 - Lead

AUGUST 2025

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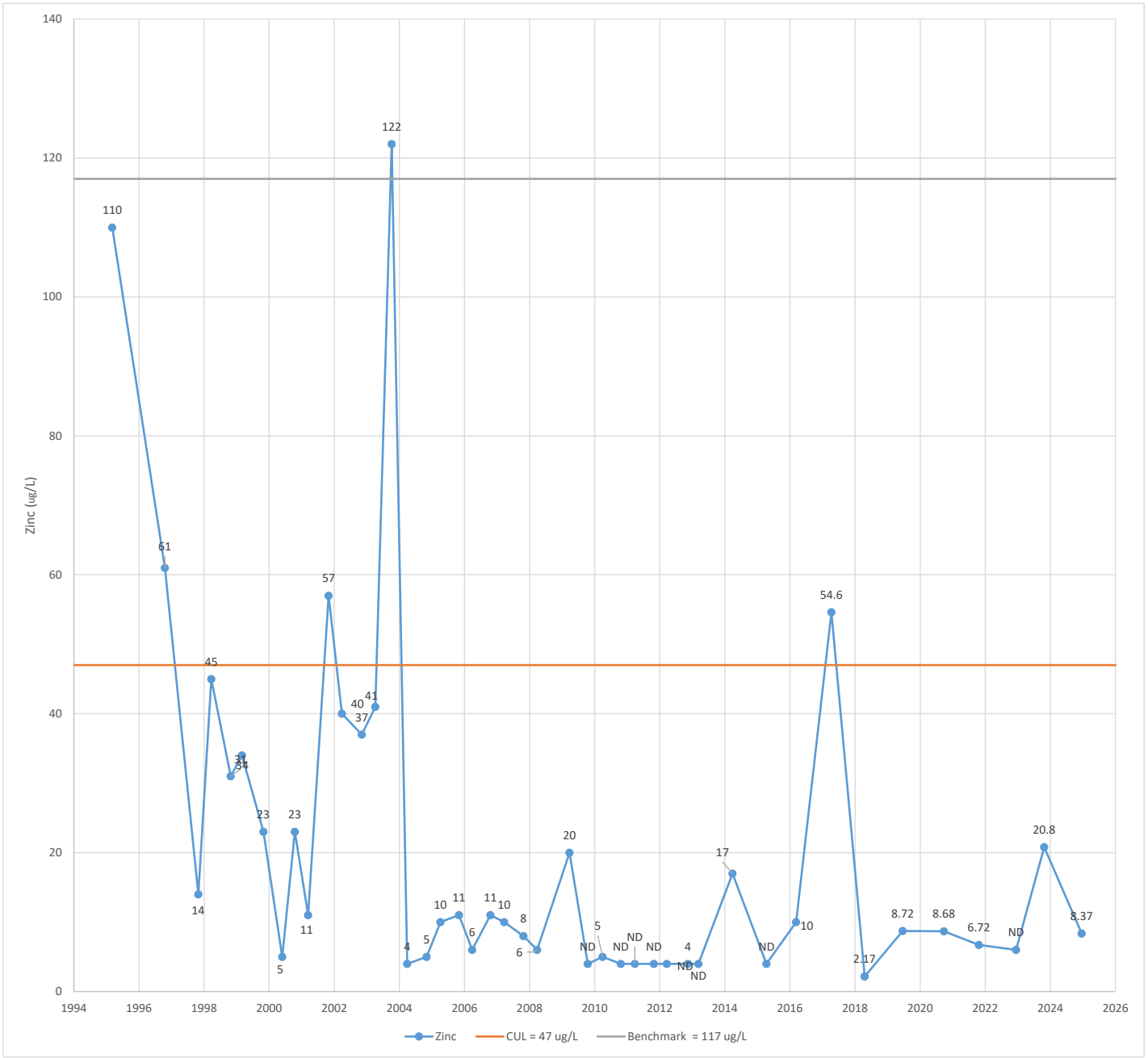
Chart

B-11



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RENTON, WASHINGTON

SW-6 - Zinc

AUGUST 2025

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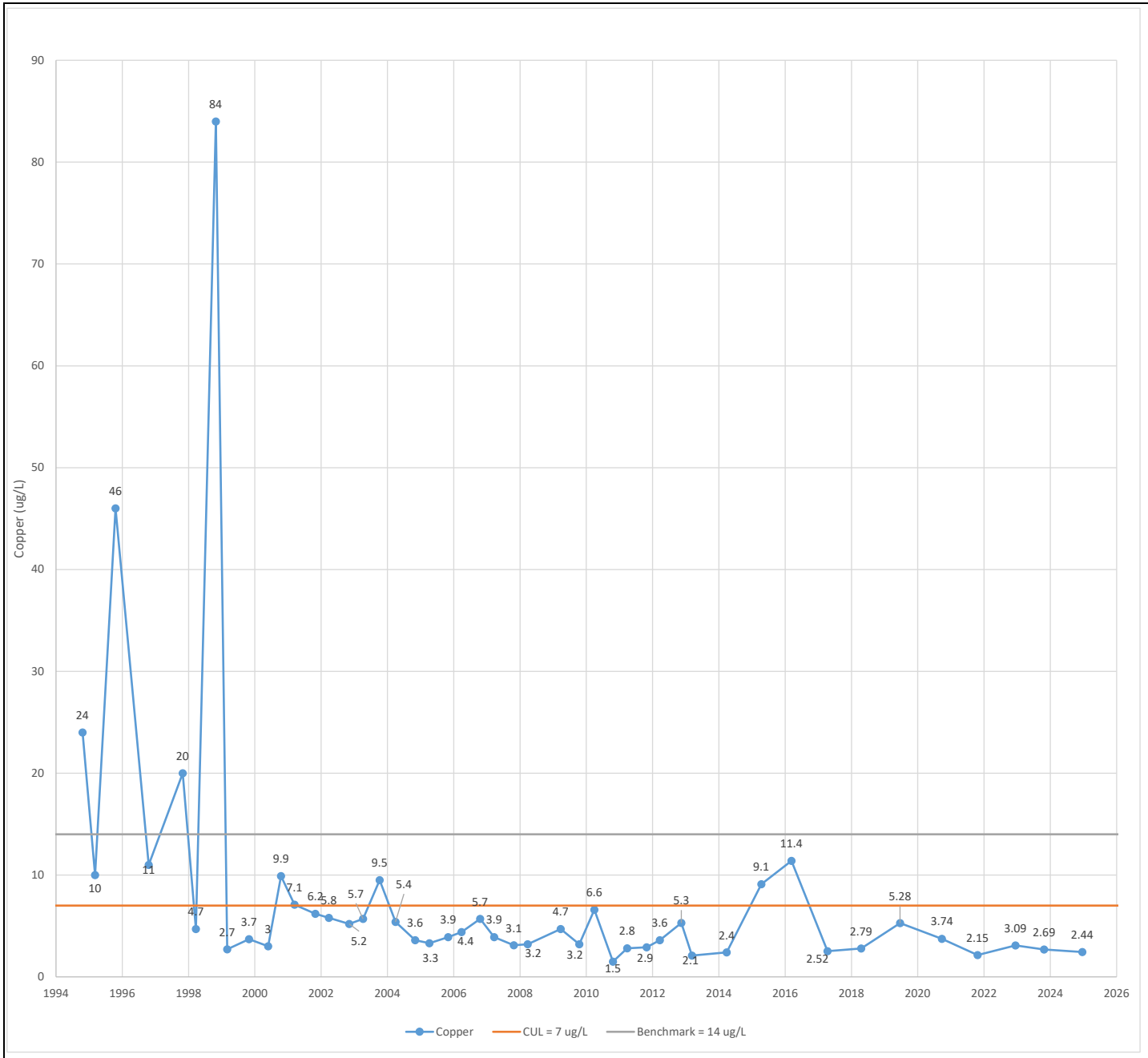
Chart

B-12



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SW-5 - Copper

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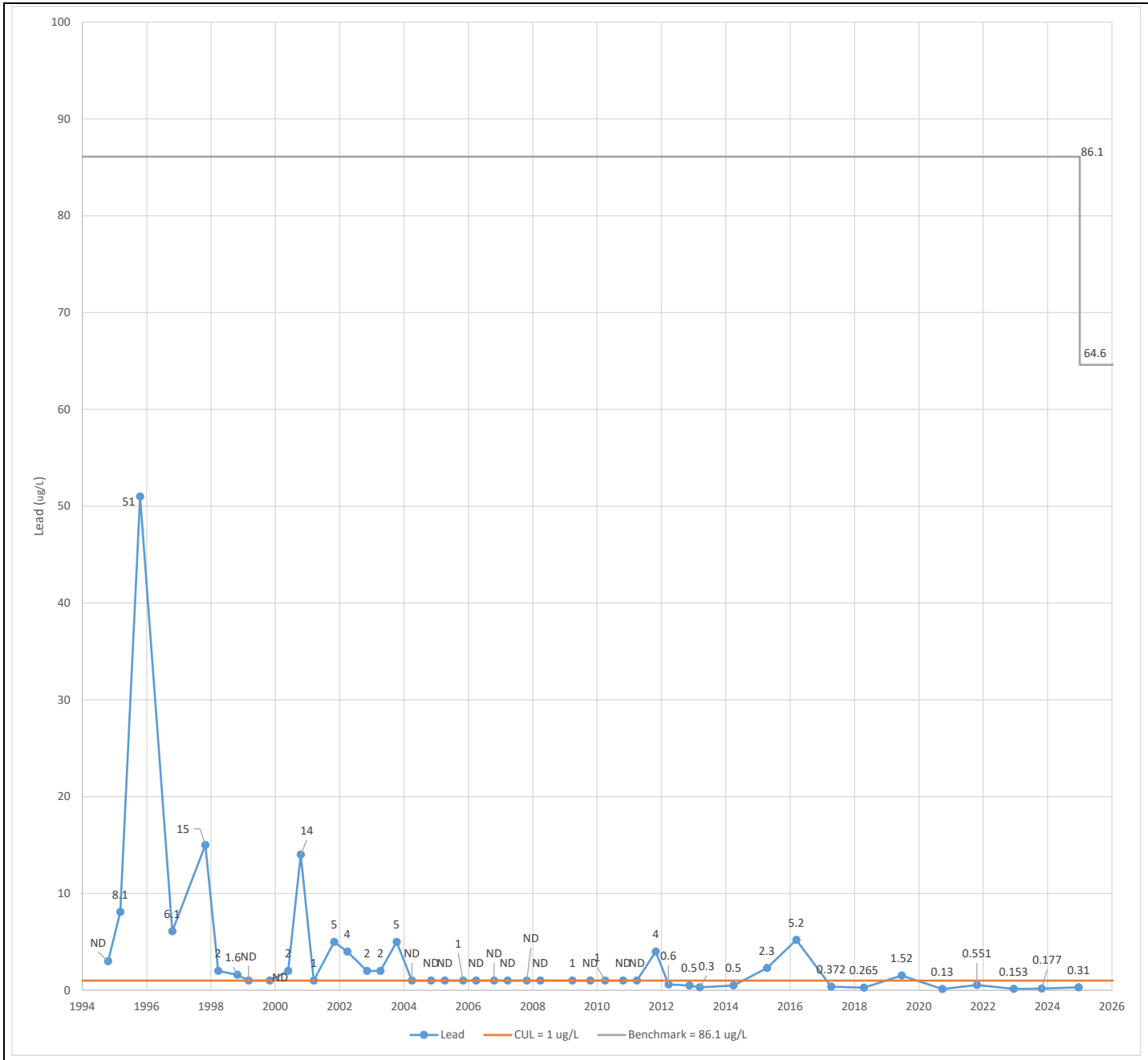
Chart

B-13



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RENTON, WASHINGTON

SW-5 - Lead

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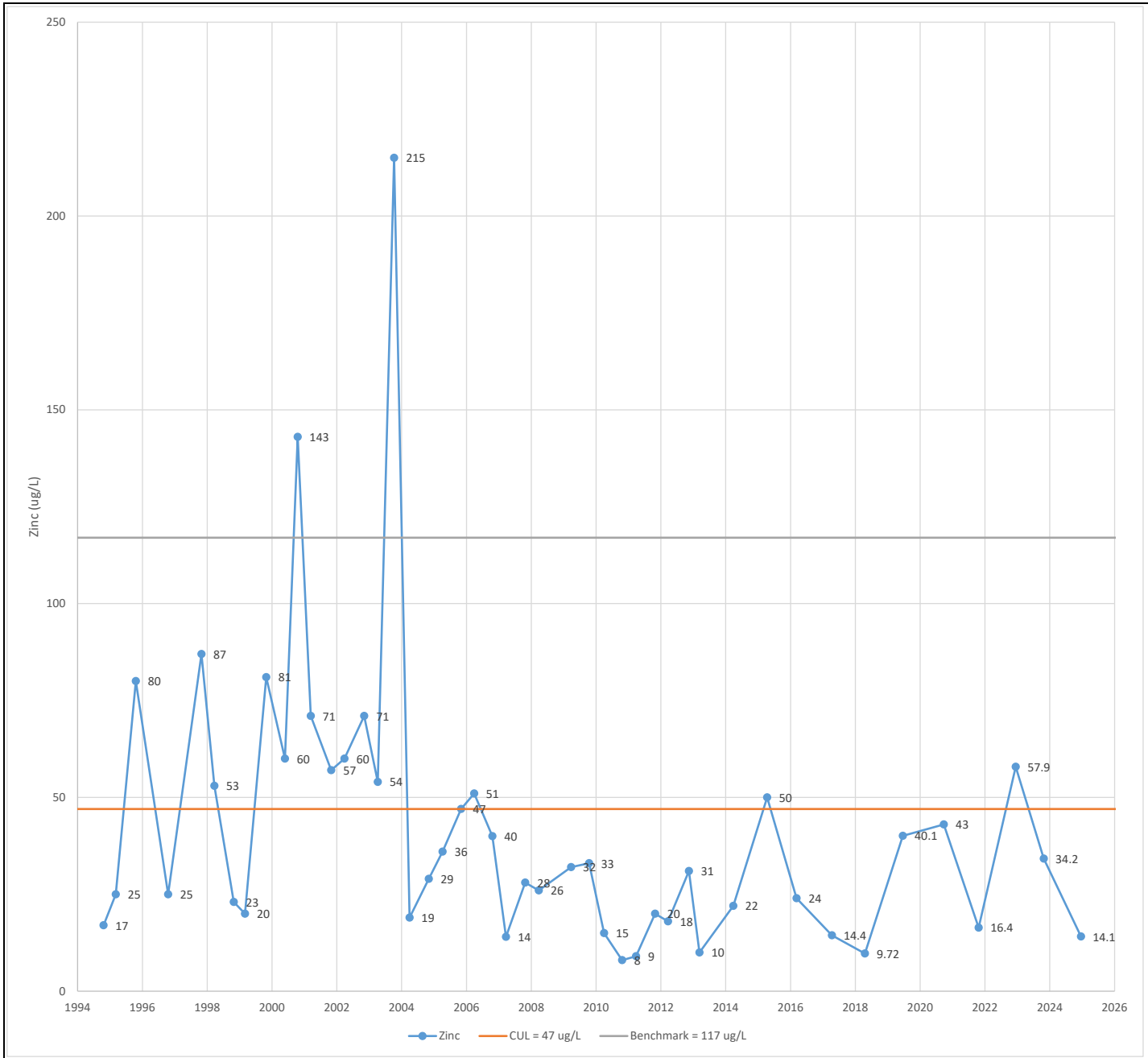
Chart

B-14



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RENTON, WASHINGTON

SW-5 - Zinc

AUGUST 2025

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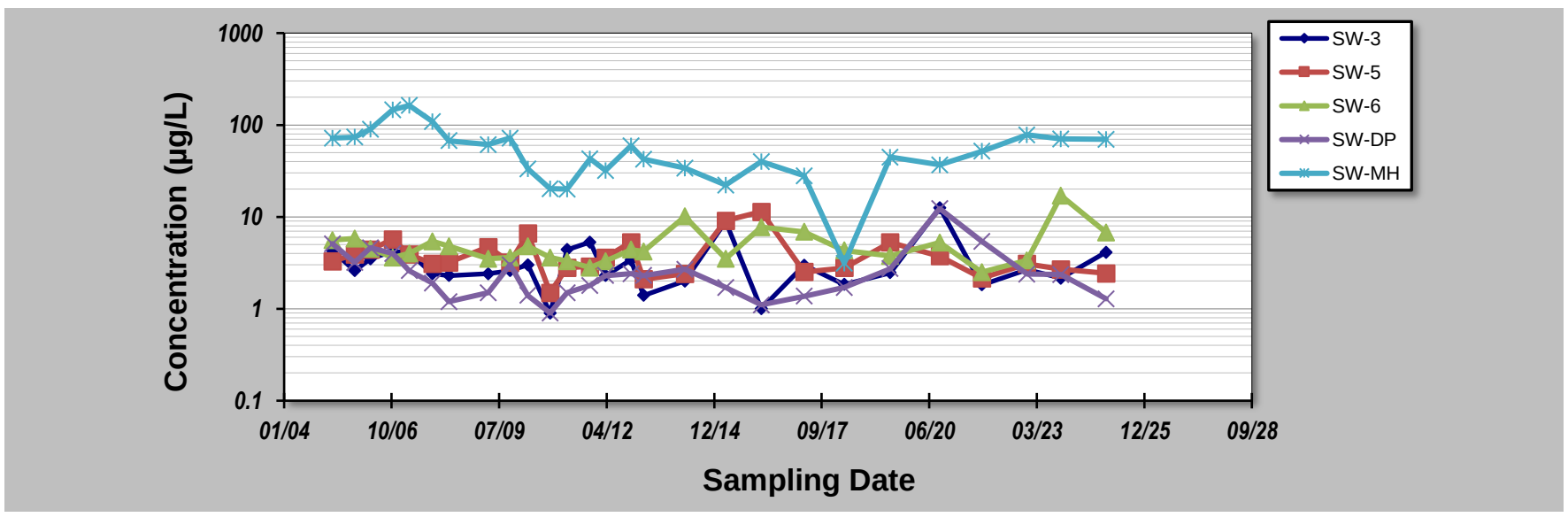
Chart
B-15

APPENDIX C
Mann-Kendall Trend Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	18-Feb-25	**Job ID:**	0203653-003
Facility Name:	PACCAR Renton	**Constituent:**	Copper
Conducted By:	Ryan Beauregard	**Concentration Units:**	µg/L

Sampling Point ID:	SW-3	SW-5	SW-6	SW-DP	SW-MH		
Sampling Event	Sampling Date	COPPER CONCENTRATION (µg/L)					
1	4/7/2005	4.3	3.3	5.6	5.1	71.7	
2	11/1/2005	2.6	3.9	5.8	3.2	73.9	
3	3/28/2006	3.5	4.4	4.5	4.6	89.8	
4	10/19/2006	4.2	5.7	3.6	4	146	
5	3/22/2007	4.1	3.9	4	2.6	163	
6	10/25/2007	2.4	3.1	5.4	1.9	109	
7	3/26/2008	2.3	3.2	4.8	1.2	67.3	
8	3/25/2009	2.4	4.7	3.5	1.5	61	
9	10/15/2009	2.6	3.2	3.6	3	72	
10	3/31/2010	3	6.6	4.8	1.4	33.4	
11	10/22/2010	0.9	1.5	3.6	0.9	20.3	
12	3/28/2011	4.4	2.8	3.3	1.5	20	
13	10/28/2011	5.3	2.9	2.8	1.8	43	
14	3/21/2012	2.3	3.6	3.3	2.3	32	
15	11/13/2012	3.4	5.3	4.4	2.4	59.4	
16	3/11/2013	1.4	2.1	4.2	2.3	42.4	
17	3/28/2014	2	2.4	10.1	2.7	34.1	
18	4/13/2015	8.9	9.1	3.5	1.7	22.2	
19	3/10/2016	1	11.4	7.7	1.1	40.1	
20	4/11/2017	2.98	2.52	6.87	1.37	28	
21	4/18/2018	1.84	2.79	4.31	1.71	3.14	
22	6/20/2019	2.47	5.28	3.75	2.73	44.7	
23	9/24/2020	12.6	3.74	5.25	12.3	36.9	
24	10/21/2021	1.82	2.15	2.5	5.4	51.7	
25	12/13/2022	2.66	3.09	3.37	2.39	78	
26	10/25/2023	2.16	2.69	17	2.36	70.7	
27	12/18/2024	4.13	2.44	6.77	1.28	70	
28							
29							
30							
Coefficient of Variation:		0.72	0.55	0.57	0.81	0.63	
Mann-Kendall Statistic (S):		-42	-73	-5	-39	-89	
Confidence Factor:		80.2%	93.3%	53.3%	78.4%	96.7%	
Concentration Trend:		Stable	Prob. Decreasing	Stable	Stable	Decreasing	



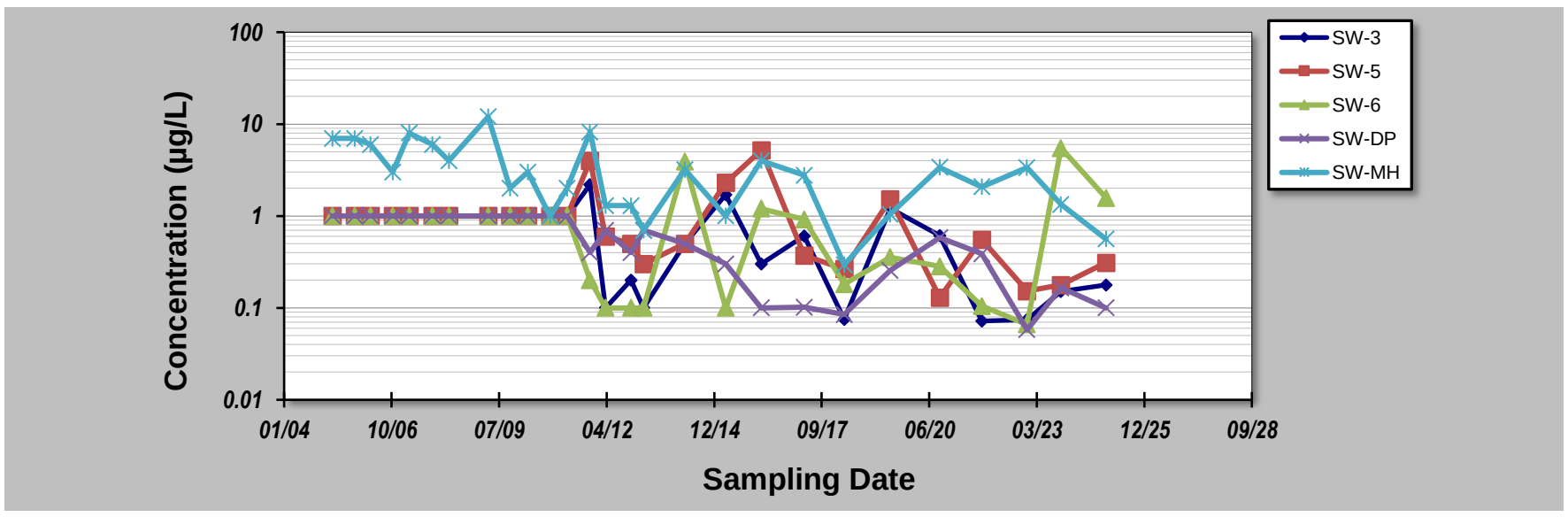
Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	18-Feb-25	Job ID:	0203653-003
Facility Name:	PACCAR Renton	Constituent:	Lead
Conducted By:	Ryan Beauregard	Concentration Units:	µg/L

Sampling Point ID:	SW-3	SW-5	SW-6	SW-DP	SW-MH		
Sampling Event	Sampling Date	LEAD CONCENTRATION (µg/L)					
1	4/7/2005	1	1	1	1	7	
2	11/1/2005	1	1	1	1	7	
3	3/28/2006	1	1	1	1	6	
4	10/19/2006	1	1	1	1	3	
5	3/22/2007	1	1	1	1	8	
6	10/25/2007	1	1	1	1	6	
7	3/26/2008	1	1	1	1	4	
8	3/25/2009	1	1	1	1	12	
9	10/15/2009	1	1	1	1	2	
10	3/31/2010	1	1	1	1	3	
11	10/22/2010	1	1	1	1	1	
12	3/28/2011	1	1	1	1	2	
13	10/28/2011	2.2	4	0.2	0.4	8.2	
14	3/21/2012	0.1	0.6	0.1	0.7	1.3	
15	11/13/2012	0.2	0.5	0.1	0.4	1.3	
16	3/11/2013	0.1	0.3	0.1	0.7	0.7	
17	3/28/2014	0.5	0.5	3.9	0.5	3.2	
18	4/13/2015	1.7	2.3	0.1	0.3	1	
19	3/10/2016	0.3	5.2	1.2	0.1	4	
20	4/11/2017	0.605	0.372	0.917	0.102	2.78	
21	4/18/2018	0.075	0.265	0.181	0.085	0.295	
22	6/20/2019	1.21	1.52	0.356	0.255	1.05	
23	9/24/2020	0.614	0.13	0.284	0.581	3.38	
24	10/21/2021	0.072	0.551	0.105	0.387	2.08	
25	12/13/2022	0.074	0.153	0.066	0.058	3.36	
26	10/25/2023	0.151	0.177	5.49	0.166	1.34	
27	12/18/2024	0.178	0.31	1.570	0.1	0.561	
28							
29							
30							
Coefficient of Variation:		0.72	1.06	1.19	0.61	0.82	
Mann-Kendall Statistic (S):		-128	-124	-65	-226	-140	
Confidence Factor:		99.7%	99.6%	90.8%	>99.9%	99.9%	
Concentration Trend:		Decreasing	Decreasing	Prob. Decreasing	Decreasing	Decreasing	



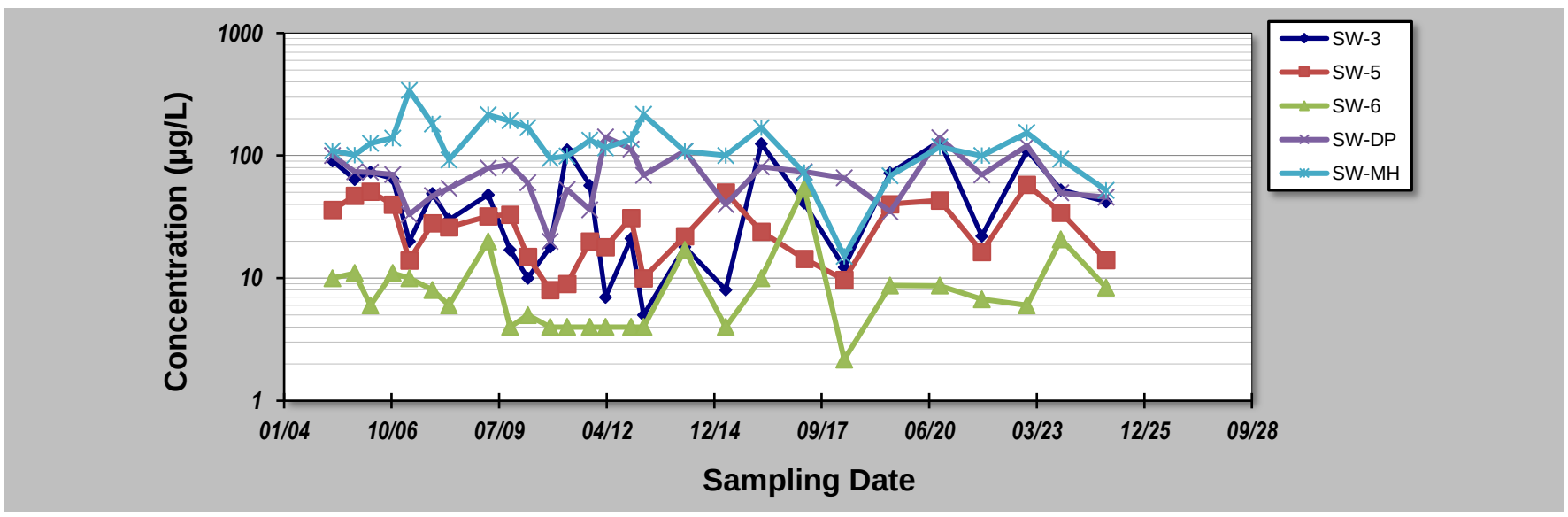
Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	18-Feb-25	Job ID:	0203653-003
Facility Name:	PACCAR Renton	Constituent:	Zinc
Conducted By:	Ryan Beauregard	Concentration Units:	µg/L

Sampling Point ID:	SW-3	SW-5	SW-6	SW-DP	SW-MH		
Sampling Event	Sampling Date	ZINC CONCENTRATION (µg/L)					
1	4/7/2005	91	36	10	100	110	
2	11/1/2005	64	47	11	74	101	
3	3/28/2006	73	51	6	73	126	
4	10/19/2006	65	40	11	70	139	
5	3/22/2007	20	14	10	33	340	
6	10/25/2007	49	28	8	47	181	
7	3/26/2008	30	26	6	54	92	
8	3/25/2009	48	32	20	79	215	
9	10/15/2009	17	33	4	84	192	
10	3/31/2010	10	15	5	60	169	
11	10/22/2010	18	8	4	20	95	
12	3/28/2011	111	9	4	53	99	
13	10/28/2011	57	20	4	36	134	
14	3/21/2012	7	18	4	142	116	
15	11/13/2012	21	31	4	113	136	
16	3/11/2013	5	10	4	69	217	
17	3/28/2014	18	22	17	109	108	
18	4/13/2015	8	50	4	40	100	
19	3/10/2016	125	24	10	81	169	
20	4/11/2017	41	14.4	55	73.9	73	
21	4/18/2018	12	9.72	2	65.7	15	
22	6/20/2019	72	40.1	9	34.9	69	
23	9/24/2020	131	43	9	140	118	
24	10/21/2021	22	16.4	6.72	69.4	99.8	
25	12/13/2022	110	57.9	6	120	154	
26	10/25/2023	52.5	34.2	20.8	49.6	93.8	
27	12/18/2024	42	14.1	8.37	45.7	52	
28							
29							
30							
Coefficient of Variation:		0.78	0.53	1.05	0.45	0.49	
Mann-Kendall Statistic (S):		-16	-31	-24	-5	-100	
Confidence Factor:		62.2%	73.2%	68.3%	53.3%	98.1%	
Concentration Trend:		Stable	Stable	No Trend	Stable	Decreasing	



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